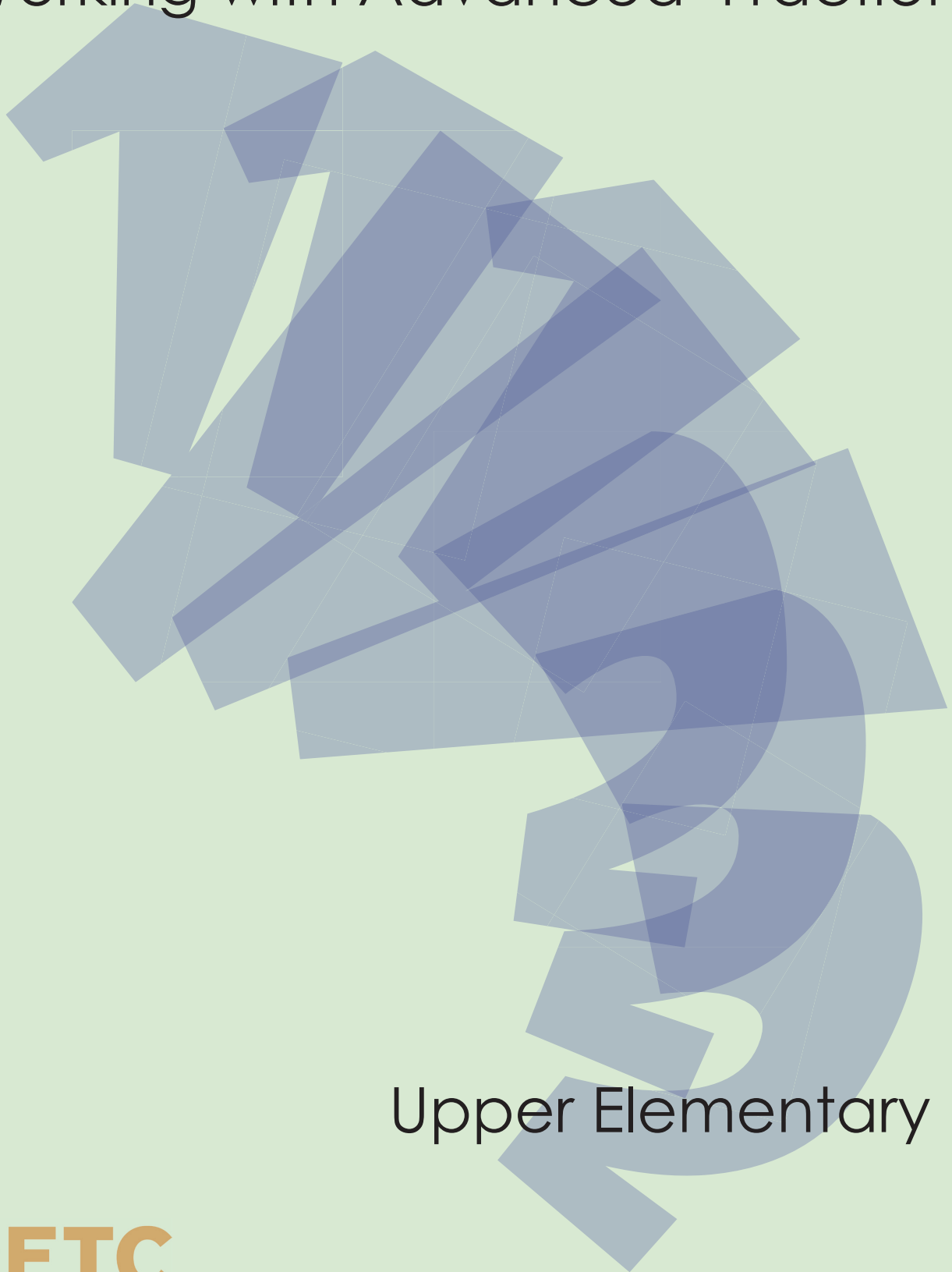
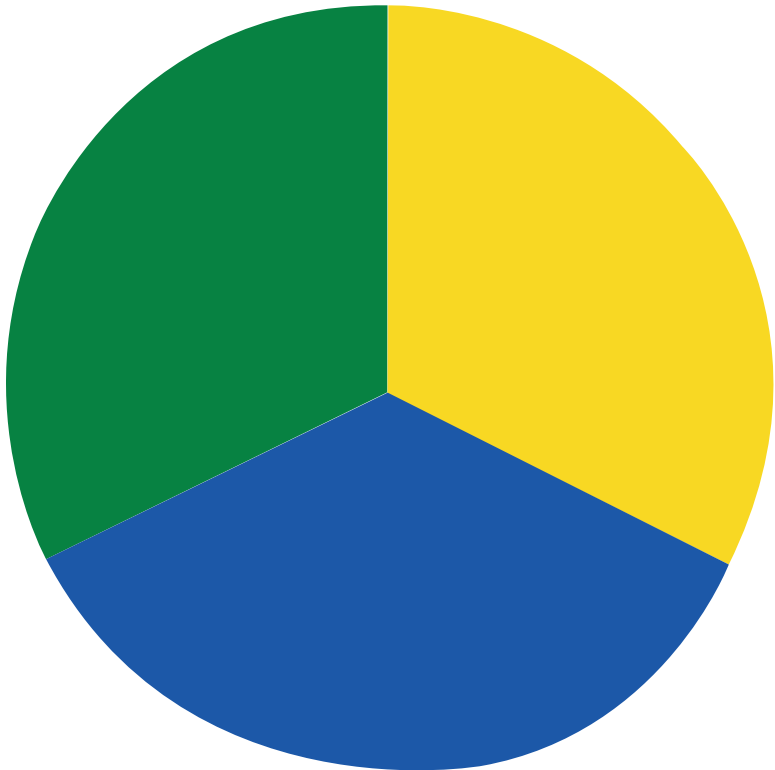
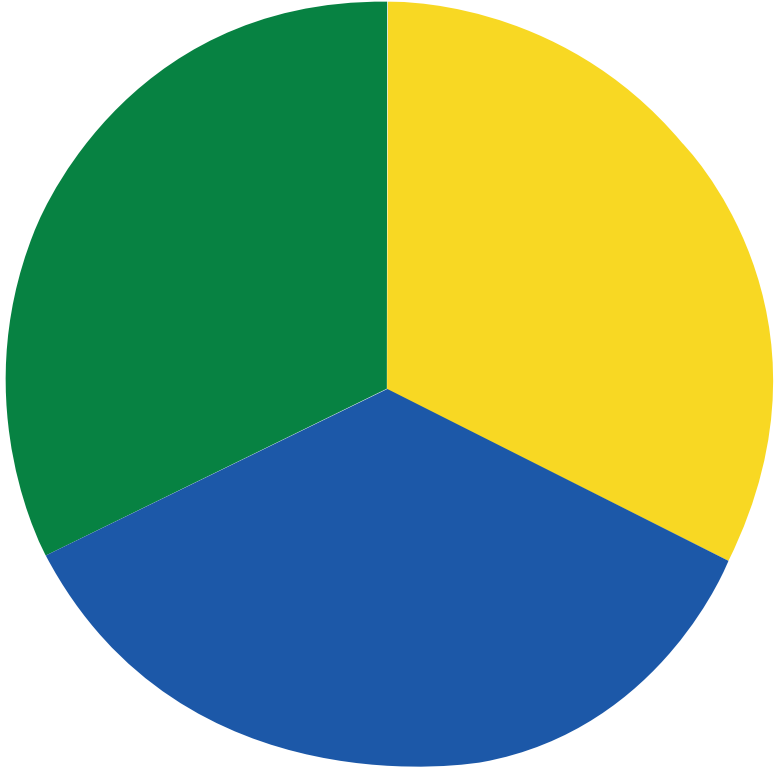
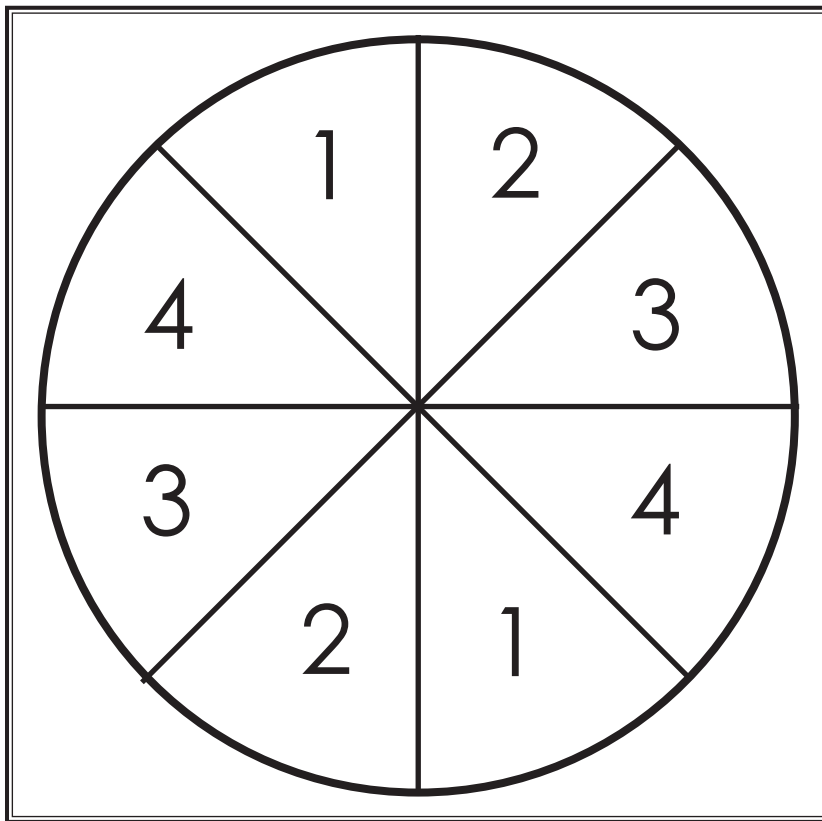
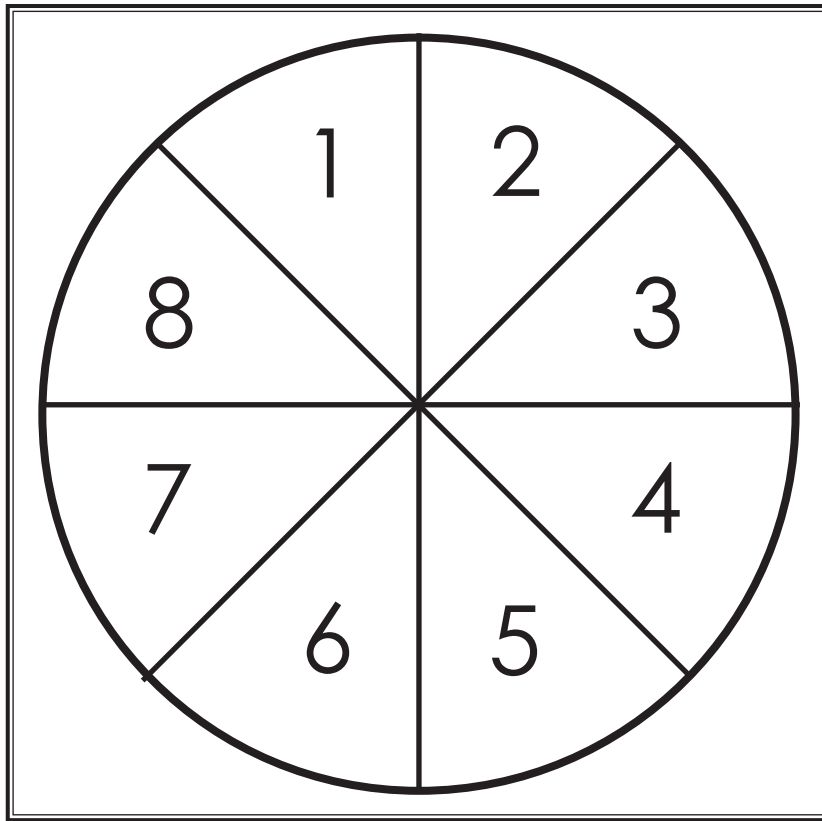


# Working with Advanced Fractions



Upper Elementary





# Multiples Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

List your common multiples.

# Fraction Task Cards Answer Sheet

**Card #**

## Equivalent Fractions

**A-1**

**Concept**

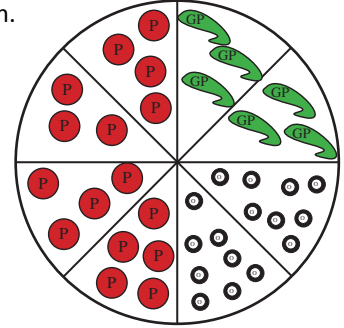
Numerator: The number above the fraction bar in a fraction

Denominator: The number below the fraction bar in a fraction.

**Operations**

1)  $\frac{4}{5}$     2)  $\frac{6}{7}$     3)  $\frac{3}{4}$     4)  $\frac{5}{7}$

**Drill**



**A-2**

**Operations**

1)  $\frac{1}{3}$                       2)  $\frac{1}{2}$                       3)  $\frac{1}{3}$                       4)  $\frac{1}{2}$

**Drill**

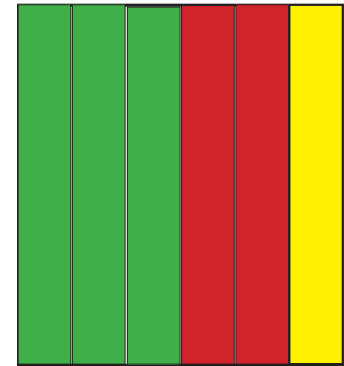
Tristan has 3 Nickels (15¢), 9 dimes (90¢) and 3 Quarters (75¢) for a total of 15 coins or \$1.80

**A-3**

**Operations**

1) 1    2)  $\frac{1}{2}$                       3)  $\frac{7}{9}$                       4)  $\frac{1}{10}$

**Drill**

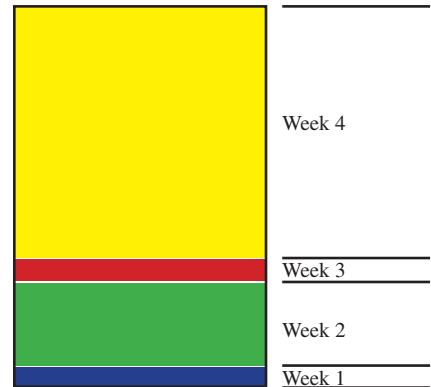


**A-4**

**Operations**

1)  $\frac{1}{2}$     2) 1    3)  $\frac{2}{3}$     4)  $\frac{5}{7}$

**Drill**



A-5

**Operations**

- 1) 1    2) 1    3)  $\frac{5}{6}$     4)  $\frac{7}{9}$

**Drill**

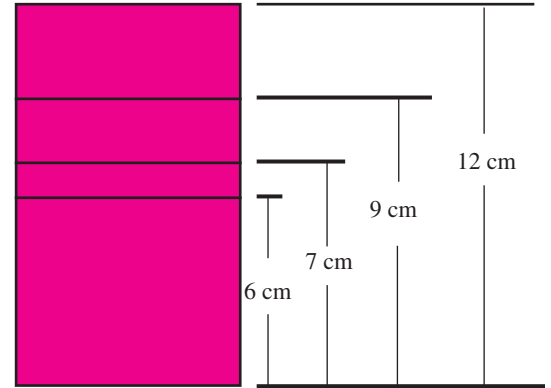
Isaac made 4 2-point shots (8 points) and 8 1-point shots (8 points) for a total of 12 shots and 16 points.

A-6

**Operations**

- 1)  $\frac{7}{10}$     2)  $\frac{3}{4}$     3)  $1\frac{1}{3}$     4)  $1\frac{2}{5}$

**Drill**



A-7

**Operations**

- 1)  $\frac{8}{9}$     2)  $\frac{3}{4}$     3) 3    4) 3

**Drill**

Yes, there will be enough because  $6+2+6+6=20$ .

A-8

**Concept**

20, 40, 60, 80, 100

**Operations**

- 1)  $1\frac{1}{10}$     2)  $1\frac{1}{16}$     3)  $1\frac{5}{14}$     4)  $1\frac{1}{18}$

**Drill**

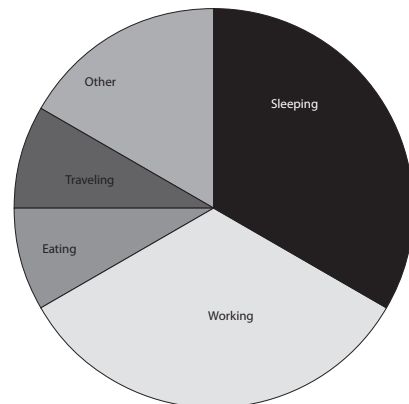
$\frac{1}{2}$  pound

A-9

**Operations**

- 1)  $1\frac{4}{9}$     2)  $\frac{17}{20}$     3) 2    4)  $\frac{4}{15}$

**Drill**



**A-10**

**Operations**     1)  $\frac{11}{12}$     2)  $1\frac{5}{16}$     3)  $1\frac{4}{15}$     4)  $1\frac{4}{11}$

**Drill**     Trenton will reach his goal of 50 push-ups on Tuesday of the following week.**A-11**

**Operations**     1)  $\frac{1}{2}$     2)  $\frac{9}{13}$     3) 1    4)  $\frac{15}{16}$

**Drill**     Normally Little Red Riding Hood takes home 3 pies, because half of the normal 6 pies is 3 pies. But today, 2 pies were eaten, so she only takes home half of the remaining 4 pies, or 2 pies. The difference is one pie.**A-12**

**Operations**     1)  $\frac{6}{7}$     2) 1    3) 2    4)  $1\frac{1}{4}$

**Drill**      $8 \text{ large sections} \times 4 \text{ small sections} = 32 \text{ sections total.}$  $\frac{8}{32} = \frac{2}{8} = \frac{1}{4}$ . Sally the spider is working on a total of  $\frac{1}{4}$  of her full web.

## Multiplicative Identity

### B-1

**Operations** 1)  $4\frac{2}{3}$  2)  $8\frac{5}{8}$  3)  $4\frac{2}{5}$  4)  $2\frac{6}{7}$

**Drill** You and your friends buy 2 packages, and eat 3 tacos each. 2 packages, allows for 12 tacos, and 12 is divisible by 4.

### B-2

**Concept** 1)  $\frac{6}{14}$  2)  $\frac{9}{21}$  3)  $\frac{12}{28}$  4)  $\frac{15}{35}$

**Operations** 1)  $9\frac{1}{7}$  2)  $2\frac{1}{5}$  3)  $6\frac{5}{8}$  4)  $7\frac{1}{2}$

**Drill** Caleb and Dominic will both be at the starting point in 24 minutes. Caleb will have completed 3 laps and Dominic will have completed 4. 24 is the lowest common multiple of 6 and 8.

### B-3

**Concept** 1)  $\frac{2}{12}, \frac{3}{18}, \frac{4}{24}, \frac{5}{30}$  2)  $\frac{2}{16}, \frac{3}{24}, \frac{4}{32}, \frac{5}{40}$  3)  $\frac{2}{10}, \frac{3}{15}, \frac{4}{20}, \frac{5}{25}$  4)  $\frac{2}{6}, \frac{3}{9}, \frac{4}{12}, \frac{5}{15}$

**Operations** 1)  $7\frac{1}{4}$  2)  $2\frac{1}{3}$  3)  $2\frac{3}{10}$  4)  $9\frac{5}{7}$

**Drill** 36 books. 36 is the lowest common multiple of 3, 4 and 9.

### B-4

**Concept** 1)  $\frac{4}{6}, \frac{6}{9}, \frac{8}{12}, \frac{10}{15}$  2)  $\frac{4}{10}, \frac{6}{15}, \frac{8}{20}, \frac{10}{25}$  3)  $\frac{4}{14}, \frac{6}{21}, \frac{8}{28}, \frac{10}{35}$  4)  $\frac{4}{18}, \frac{6}{27}, \frac{8}{36}, \frac{10}{45}$

**Operations** 1)  $6\frac{7}{8}$  2)  $\frac{2}{9}$  3)  $4\frac{5}{6}$  4)  $4\frac{1}{7}$

**Drill** The large wheel will go around 5 times and the small wheel will go around 8 times.

### B-5

**Concept** 1)  $\frac{6}{10}, \frac{9}{15}, \frac{12}{20}, \frac{15}{25}$  2)  $\frac{14}{16}, \frac{21}{24}, \frac{28}{32}, \frac{35}{40}$  3)  $\frac{10}{12}, \frac{15}{18}, \frac{20}{24}, \frac{25}{30}$  4)  $\frac{18}{20}, \frac{27}{30}, \frac{36}{40}, \frac{45}{50}$

**Operations** 1) 3 2) 7 3) 9 4) 2

**Drill** The slower light blinks 10 times per minute, or once every 6 seconds. The faster light blinks 12 times per minute, or once every 5 seconds. This means that they will blink at the same time after 30 seconds, which is the lowest common multiple of 5 and 6.

### B-6

**Operations** 1) 1 2) 5 3) 4 4) 8

**Drill** Erich and Evan would meet on the soccer field again after 20 days. 20 is the lowest common multiple of 4 and 5.



**B-7**

**Operations** 1)  $10\frac{7}{10}$  2)  $2\frac{7}{8}$  3)  $4\frac{3}{4}$  4)  $7\frac{5}{6}$

**Drill** The Bells at St. Mary's toll 5 times per minute, or once every 12 seconds. The Bells at St. Jude's toll 6 times per minute, or once every 10 seconds. The Bells at St. Joseph's toll 3 times per minute, or once every 20 seconds. They will all toll at the same time after 60 seconds, because 60 is the lowest common multiple of 10, 12 and 20.

**B-8**

**Concept** 1) GCF = 3,  $\frac{3}{4}$  2) GCF = 4,  $\frac{1}{4}$  3) GCF = 10,  $\frac{1}{3}$  4) GCF = 7,  $\frac{3}{4}$

**Operations** 1)  $3\frac{1}{12}$  2)  $8\frac{2}{5}$  3)  $6\frac{1}{6}$  4)  $7\frac{3}{7}$

**Drill** The smallest amount of hot dogs Trish can buy is 40 hot dogs. That would be 4 packages of hot dogs and 5 packages of buns.

**B-9**

**Concept** 1) GCF = 6,  $\frac{1}{2}$  2) GCF = 8,  $\frac{1}{2}$  3) GCF = 5,  $\frac{2}{5}$  4) GCF = 8,  $\frac{4}{5}$

**Operations** 1)  $3\frac{9}{10}$  2)  $3\frac{4}{5}$  3) 6 4)  $10\frac{1}{5}$

**Drill** It will be 10 days before the two play on the same day. 10 is the lowest common multiple of 2 and 5.

**B-10**

**Concept** 1) GCF = 6,  $\frac{1}{3}$  2) GCF = 4,  $\frac{1}{5}$  3) GCF = 15,  $\frac{1}{3}$  4) GCF = 7,  $\frac{1}{4}$

**Operations** 1)  $3\frac{7}{10}$  2)  $10\frac{3}{4}$  3)  $6\frac{5}{6}$  4)  $4\frac{7}{8}$

**Drill** The harp and the goose will both produce on the same day after 28 days. 28 is the lowest common multiple of 4 and 7.

**B-11**

**Concept** 1)  $\frac{4}{14}, \frac{6}{21}, \frac{8}{28}, \frac{10}{35}$  2)  $\frac{8}{18}, \frac{12}{27}, \frac{16}{36}, \frac{20}{45}$  3)  $\frac{6}{20}, \frac{9}{30}, \frac{12}{40}, \frac{15}{50}$  4)  $\frac{6}{10}, \frac{9}{15}, \frac{12}{20}, \frac{15}{25}$  5)  $\frac{2}{3}$  6)  $\frac{3}{4}$   
7)  $\frac{4}{7}$  8)  $\frac{1}{2}$

**Operations** 1)  $\frac{11}{12}$  2)  $1\frac{5}{16}$  3)  $1\frac{4}{15}$  4)  $1\frac{4}{11}$

**Drill** There will be 24 guests at the party. Kousika's mother has bought enough party favors for this many people. 2 packages of 12 balloons is 24 balloons, 3 packages of 8 hats is 24 hats, and 8 packages of 3 rings is 24 rings.

**B-12**

**Concept** 1)  $\frac{10}{24}, \frac{15}{36}, \frac{20}{48}, \frac{25}{60}$  2)  $\frac{10}{12}, \frac{15}{18}, \frac{20}{24}, \frac{25}{30}$  3)  $\frac{6}{26}, \frac{9}{39}, \frac{12}{52}, \frac{15}{65}$  4)  $\frac{6}{34}, \frac{9}{51}, \frac{12}{68}, \frac{15}{85}$  5)  $\frac{1}{4}$  6)  $\frac{3}{11}$   
7)  $\frac{2}{3}$  8)  $\frac{3}{4}$

**Operations** 1)  $1\frac{5}{8}$  2)  $2\frac{1}{5}$  3)  $1\frac{4}{7}$  4)  $1\frac{4}{10}$

**Drill** Mary, Jack and Prince Charming would all take their animals to the field on the same day after 30 days. 30 is the lowest common multiple of 3, 5, and 2.

## Addition and Subtraction With Unlike Denominators

**C-1**

- Operations** 1)  $\frac{7}{12}$  2)  $\frac{1}{10}$   
**Drill** Sara has filled her bag the most with  $\frac{4}{5}$  or  $\frac{8}{10}$

**C-2**

- Operations** 1)  $\frac{3}{4}$  2)  $\frac{3}{16}$  3)  $1\frac{4}{15}$  4)  $1\frac{4}{9}$   
**Drill** 13 squares are painted white.

**C-3**

- Concept** 1)  $100 = 2 \cdot 2 \cdot 5 \cdot 5$  2)  $54 = 2 \cdot 3 \cdot 3 \cdot 3$  3)  $64 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$   
 4)  $108 = 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3$   
**Operations** 1)  $1\frac{2}{5}$  2)  $\frac{1}{6}$  3)  $\frac{4}{15}$  4)  $\frac{2}{3}$   
**Drill** Monday, because they both swim  $\frac{1}{3}$  of their total amount of laps on that day.

**C-4**

- Concept** 1)  $350 = 2 \cdot 5 \cdot 5 \cdot 7$  2)  $180 = 2 \cdot 2 \cdot 3 \cdot 3 \cdot 5$  3)  $42 = 2 \cdot 3 \cdot 7$   
 4)  $90 = 2 \cdot 3 \cdot 3 \cdot 5$  5)  $99 = 3 \cdot 3 \cdot 11$   
**Operations** 1)  $\frac{2}{3}$  2)  $1\frac{7}{15}$  3)  $\frac{7}{12}$  4)  $\frac{11}{42}$   
**Drill** Alex is correct. Alex ate  $\frac{5}{8}$  of his pizza, which is  $\frac{15}{24}$ . Justin only ate  $\frac{6}{12}$  of his pizza, which is less than  $\frac{12}{24}$ .

**C-5**

- Concept** 1) 1296 2) 3125 3) 81 4) 256  
**Operations** 1)  $\frac{16}{35}$  2)  $\frac{1}{30}$  3)  $\frac{13}{14}$  4)  $1\frac{1}{33}$   
**Drill** Caitlin read  $\frac{1}{8}$  of the book on the 4<sup>th</sup> day.  $\frac{90}{720} = \frac{1}{8}$

**C-6**

- Concept** 1)  $84 = 2 \cdot 2 \cdot 3 \cdot 7 = 2^2 \cdot 3 \cdot 7$  2)  $120 = 2 \cdot 2 \cdot 2 \cdot 3 \cdot 5 = 2^3 \cdot 3 \cdot 5$   
 3)  $60 = 2 \cdot 2 \cdot 3 \cdot 5 = 2^2 \cdot 3 \cdot 5$  4)  $50 = 2 \cdot 5 \cdot 5 = 2 \cdot 5^2$   
 5)  $400 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 5 \cdot 5 = 2^4 \cdot 5^2$  6)  $90 = 2 \cdot 3 \cdot 3 \cdot 5 = 2 \cdot 3^2 \cdot 5$   
**Operations** 1)  $1\frac{9}{40}$  2)  $\frac{5}{12}$  3)  $\frac{1}{12}$  4)  $\frac{9}{9} = 1$   
**Drill** Suzie found the lowest common multiple of all the fraction denominators to be 24. She converted each fraction so that 24 was in the denominator, and put them in the order of  $\frac{1}{4}, \frac{8}{24}, \frac{3}{6}, \frac{2}{3}, \frac{3}{4}$ .

**C-7**

<b>Concept</b>	1) $500 = 2 \cdot 2 \cdot 5 \cdot 5 \cdot 5 = 2^2 \cdot 5^3$	2) $200 = 2 \cdot 2 \cdot 2 \cdot 5 \cdot 5 = 2^3 \cdot 5^2$		
	3) $1323 = 3 \cdot 3 \cdot 3 \cdot 7 \cdot 7 = 3^3 \cdot 7^2$	4) $224 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 7 = 2^5 \cdot 7$		
	5) $2025 = 3 \cdot 3 \cdot 3 \cdot 3 \cdot 5 \cdot 5 = 3^4 \cdot 5^2$			
<b>Operations</b>	1) $1 \frac{11}{21}$	2) $1 \frac{1}{3}$	3) $\frac{1}{4}$	4) $\frac{1}{4}$
<b>Drill</b>	$\frac{7}{8} + \frac{3}{4} + \frac{3}{4} = \frac{19}{8} = 2 \frac{3}{8}$ cups of dry ingredients			

**C-8**

<b>Operations</b>	1) $1 \frac{3}{10}$	2) $\frac{1}{12}$	3) $\frac{1}{5}$	4) $1 \frac{29}{55}$
<b>Drill</b>	Simon will need to order flower tomorrow. He used 16 bags on the first day, 16 bags on the 2 <sup>nd</sup> day, and should use 16 bags tomorrow. He will then only have 8 bags left, and will probably need 16 bags, therefore he should order flower tomorrow.			

**C-9**

<b>Concept</b>	1) 54	2) 180	3) 140	4) 240	5) 60	6) 56
<b>Operations</b>	1) $\frac{1}{2}$	2) 1	3) 4	4) 3		
<b>Drill</b>	Cinderella is correct. $\frac{3}{4}$ of 36 is 27. They both have 27 dances.					

**C-10**

<b>Concept</b>	1) 135	2) 64	3) 231	4) 96	5) 990	6) 910
<b>Operations</b>	1) 1	2) 1	3) 5	4) 5		
<b>Drill</b>	Chris lives higher up. Matthew lives on the 20 <sup>th</sup> floor, which is $\frac{8}{10}$ the full height of the building. Chris lives at $\frac{9}{10}$ , so he is higher.					

## Multiplication of Fractions

### D-1

**Concept** 10 times; This is because the probability of the spinner landing on green is 1 in 3. Therefore, the same probability can be extrapolated to be 10 times in 30.

**Operations** 1)  $\frac{2}{3}$       2)  $\frac{4}{5}$       3)  $\frac{1}{2}$       4)  $\frac{2}{3}$

**Drill**  $\frac{2}{5} + \frac{1}{2} = \frac{9}{10}$  of a cup of flour.

### D-2

**Concept** the probability of rolling an odd number each time you roll the dice is 3 in 6 ( or 1 in 2). If you roll the dice 36 times, the probability of rolling an odd number is 18 in 36.

**Operations** 1)  $1\frac{3}{5}$     2)  $2\frac{1}{2}$     3) 2      4)  $1\frac{1}{7}$

**Drill** No, Miles has more than a full bin's worth of trash.  $\frac{2}{6} + \frac{3}{4} = \frac{4}{12} + \frac{9}{12} = \frac{13}{12} = 1\frac{1}{12}$

### D-3

**Concept** Yes, the game is fair, because there is a  $\frac{2}{6}$  or  $\frac{1}{3}$  chance both for rolling above a 4 or below a 3.

**Operations** 1)  $\frac{1}{8}$       2)  $\frac{1}{15}$

**Drill** Sasha has  $\frac{16}{36}$  or  $\frac{4}{9}$  of the whole box left.

### D-4

**Concept** 1) 1 in 2      2) 2 in 4      3) 6 in 36      4) 1 in 52

**Operations** 1)  $\frac{1}{48}$     2)  $\frac{1}{30}$     3)  $\frac{1}{12}$     4)  $\frac{3}{16}$

**Drill** There were 3 tissues in the trash.

### D-5

**Concept** 5 times out of 40 the spinner should land on 5.

**Operations** 1)  $\frac{1}{10}$     2)  $\frac{1}{9}$     3)  $\frac{1}{4}$     4)  $\frac{4}{21}$     5)  $\frac{9}{40}$     6)  $\frac{1}{6}$

**Drill** 28 license plates are from Texas

### D-6

**Concept**  $\frac{1}{2}, \frac{1}{2}, \frac{1}{4}$

**Operations** 1)  $\frac{2}{7}$     2)  $\frac{5}{18}$     3)  $\frac{4}{15}$     4)  $\frac{7}{32}$     5)  $\frac{7}{12}$     6)  $\frac{9}{16}$

**Drill**  $\frac{3}{8}$  of a yard.

**D-7**

**Operations**    1)  $\frac{3}{10}$     2)  $\frac{2}{3}$     3)  $\frac{1}{2}$     4)  $\frac{4}{7}$     5)  $\frac{3}{10}$     6)  $\frac{1}{3}$

**Drill**     $\frac{4}{5} + \frac{3}{4} = \frac{16}{20} + \frac{15}{20} = \frac{31}{20} = 1\frac{11}{20}$  miles

**D-8**

**Concept**     $\frac{2}{8} = \frac{1}{4}$     a)  $\frac{1}{4}$     b)  $\frac{1}{2}$     c)  $\frac{1}{4}$

**Operations**    1)  $\frac{4}{25}$     2)  $\frac{1}{6}$     3)  $\frac{1}{8}$     4) 1    5)  $1\frac{1}{8}$     6)  $\frac{1}{2}$

**Drill**     $\frac{6}{8} + \frac{1}{3} = \frac{18}{24} + \frac{8}{24} = 1\frac{2}{24} = 1\frac{1}{12}$  of a yard of fabric.

**D-9**

**Concept**    0, 1,  $\frac{1}{6}$ ,  $\frac{1}{2}$

**Operations**    1)  $\frac{1}{3}$     2)  $1\frac{7}{8}$     3)  $\frac{3}{5}$     4)  $\frac{3}{7}$     5) 1    6)  $1\frac{1}{2}$

**Drill**     $5\frac{1}{3}$  of a foot of snow.

**D-10**

**Concept**    you should draw a yellow cube 20 times, a blue cube 4 times, a pink cube 16 times and a green cube 0 times.

**Operations**    1) 1    2) 1    3) 1    4) 1    5) 1    6) 1

**Drill**     $\frac{6}{10} - \frac{3}{25} = \frac{60}{100} - \frac{12}{100} = \frac{48}{100} = \frac{12}{25}$  of a second.

## Division of Fractions

### E-1

**Operations**    1)  $\frac{2}{9}$     2)  $\frac{1}{8}$     3)  $\frac{4}{10}$  or  $\frac{2}{5}$     4)  $\frac{1}{6}$

**Drill**     $\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$

### E-2

**Concept**

1) 4:22,  $4/22, \frac{4}{22}$ , The ratio of children to computers is Four to Twenty-two.  
 2) 36:9,  $36/9, \frac{36}{9}$ , The ratio of legs to cows is thirty-six to nine.  
 3) 17:6,  $17/6, \frac{17}{6}$ , The ratio of pencils to erasers is seventeen to six.  
 4) 15:12,  $15/12, \frac{15}{12}$  The ratio of Geese to Ducks is fifteen to twelve  
 5) 26:425,  $26/425, \frac{26}{425}$  The ratio of teachers to students is 26 to 425.

**Operations**    1)  $\frac{1}{5}$     2)  $\frac{1}{9}$     3)  $\frac{1}{8}$     4)  $\frac{3}{8}$

**Drill**     $\frac{4}{12}$  or  $\frac{1}{3}$

### E-3

**Concept**    1) 11:4,  $11/4, \frac{11}{4}$                       2) 5:2,  $5/2, \frac{5}{2}$

**Drill**     $\frac{1}{5}$

### E-4

**Concept**    There are 18 cars for the 36 students; which means that for every car, there are 2 students.

**Operations**    1)  $1\frac{1}{5}$     2)  $\frac{3}{8}$     3)  $\frac{3}{4}$     4)  $\frac{2}{3}$     5)  $\frac{3}{4}$     6)  $\frac{2}{5}$

**Drill**     $\frac{1}{2} \cdot \frac{2}{8} = \frac{2}{16} = \frac{1}{8}$  of the report is filled with typing.

### E-5

**Concept**

There are 3 eggs for every person.  
 There are two toddlers for every toy.  
 There are 3 footballs for every class.  
 There are 5 homeworks for every 7 days.  
 There are 4 sandwiches for each player.

**Operations**    1)  $1\frac{1}{3}$     2)  $\frac{3}{7}$     3)  $\frac{8}{9}$     4)  $\frac{4}{5}$     5)  $1\frac{1}{5}$     6)  $\frac{1}{2}$

**Drill**     $\frac{5}{6} \cdot \frac{3}{4} = \frac{15}{24} = \frac{5}{8}$  of a mile.

**E-6**

**Concept** There are 21 flower stickers and 15 heart stickers.  
**Operations** 1)  $\frac{1}{2}$  2)  $\frac{4}{7}$  3)  $\frac{4}{9}$  4)  $\frac{3}{5}$  5)  $\frac{3}{10}$  6)  $\frac{4}{5}$   
**Drill** No, it is just a coincidence.

**E-7**

**Concept** 12 fig trees and 4 apple trees  
**Operations** 1)  $\frac{3}{4}$  2) 4 3)  $1\frac{3}{4}$  4)  $\frac{15}{16}$  5)  $1\frac{1}{5}$  6)  $1\frac{13}{14}$   
**Drill**  $\frac{2}{3} \cdot \frac{5}{8} = \frac{10}{24} = \frac{5}{12}$  of a meter long

**E-8**

**Concept** 9 black shirts and 6 grey shirts  
**Operations** 1)  $\frac{1}{3}$  2)  $\frac{16}{21}$  3) 6 4)  $1\frac{1}{8}$  5)  $\frac{14}{15}$  6)  $\frac{8}{21}$   
**Drill** He can expect to win 250 times.

## Operations With Mixed Fractions

**F-1**

**Concept** 54, 81, 108, 137, 162, 189  
**Drill** Connie originally put 80 pizzas in the oven.

**F-2**

**Concept** Dollars: 9, 18, 27, 36, 45, 54, 63, 72, 81  
 64 Hours: 1, 2, 3, 4, 5, 6, 7, 8, 9, Dollars: 8, 16, 24, 32, 40, 48, 56, 64  
 Pounds: 1, 2, 3, 4, 5, 6, 7, 8,  
**Operations** 1)  $\frac{11}{6}$  2)  $\frac{38}{7}$  3)  $\frac{11}{3}$  4)  $\frac{32}{12}$   
**Drill** 20 people.

**F-3**

**Concept**  $2 \cdot 27 = 54$   $3 \cdot 18 = 54$   
**Operations** 1)  $\frac{22}{5}$  2)  $\frac{31}{9}$  3)  $\frac{25}{3}$  4)  $\frac{67}{10}$   
**Drill** There are 16 total members on the team. 8 are good butterfly swimmers, 4 are good breast stroke swimmers, 2 like free-style swimming and 2 are coaches.

**F-4**

**Concept** 1) = 2)  $\neq$  3)  $\neq$  4) = 5) = 6)  $\neq$   
**Operations** 1)  $\frac{1}{2}$  2)  $9\frac{3}{4}$  3)  $1\frac{2}{5}$   
**Drill** 576 total applicants. 288 from US, 144 from China, 72 from Japan, 36 from France, 18 from Australia, and 18 from South America.

**F-5**

**Concept** 1) 1 2) 9 3) 2 4) 4 5) 10 6) 3  
**Operations** 1)  $6\frac{4}{25}$  2)  $\frac{21}{33}$  3)  $25\frac{1}{2}$   
**Drill** Each guard received  $\frac{1}{6}$  of the bag.

**F-6**

**Operations** 1)  $\frac{21}{25}$  2)  $3\frac{51}{63}$  3)  $\frac{4}{21}$  4)  $\frac{45}{192}$   
**Drill** Each had  $\frac{2}{9}$  of the pizza.

**F-7**

**Concept** \$89,090.91  
**Operations** 1)  $2\frac{1}{24}$  2)  $2\frac{58}{91}$  3)  $34\frac{7}{27}$   
**Drill** 24 cans of dark blue, 40 cans of firehouse red, 16 cans of beige.



**F-8**

**Concept** The lower end should be  $\frac{37}{16}$  of an inch  $2\frac{5}{16}$  lower than the starting point.

**Operations** 1)  $16\frac{7}{8}$  2)  $\frac{24}{35}$  3)  $10\frac{8}{15}$

**Drill** Each charity received  $\frac{1}{9}$  of the original collection.

**F-9**

**Concept** The picture will be  $6\frac{3}{10}$  inches tall.

**Operations** 1)  $6\frac{11}{32}$  2)  $3\frac{1}{25}$  3)  $7\frac{2}{9}$

**Drill** Cinderella used  $\frac{1}{12}$  the amount of her original time to do each of the last three activities.

**F-10**

**Concept** The Total population of deer should be 1,728 deer.

**Operations** 1)  $5\frac{17}{56}$  2)  $1\frac{11}{63}$  3)  $5\frac{1}{3}$

**Drill** 80 chairs in total. 40 in the parent section, 20 in the children section, 10 in the teacher's section and 10 for the choral-club.

## Simplifying With the Multiplicative Identity

G-1

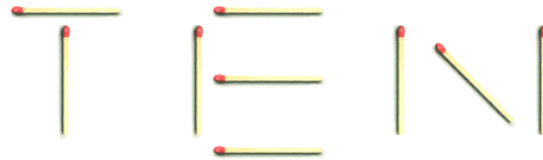
**Drill** The cost for 400 shirts will be \$666.67.

G-2

**Concept** Dallas to Fort Worth is approximately 35 miles. Fort Worth to Waco is approximately 85 miles. Waco to Houston is approximately 185 miles.

**Operations** 1)  $\frac{1}{6}$  2)  $\frac{5}{24}$  3)  $1\frac{5}{7}$  4)  $\frac{7}{11}$

**Drill**



G-3

**Concept** 4200 feet long, 746 feet high

**Operations** 1)  $\frac{1}{24}$  2)  $\frac{1}{2}$  3)  $\frac{2}{5}$  4)  $1\frac{2}{3}$

**Drill** Baker should order 48 pounds of apples.

G-4

**Operations** 1)  $\frac{1}{3}$  2)  $\frac{1}{5}$  3)  $2\frac{2}{3}$  4) 1

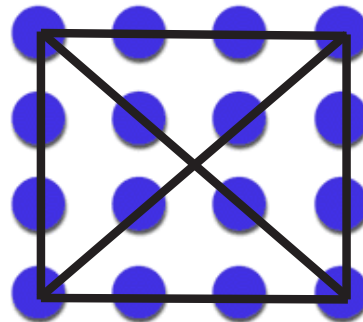
**Drill** Jill picked 30 peaches.

G-5

**Concept** No, Travis should use proportions to scale down the picture. Not subtraction. The poster should actually be 1.5 feet long.

**Operations** 1)  $6\frac{9}{16}$  2) 1 3) 8

**Drill**



G-6

**Concept**

1.875 miles

**Operations**

1)  $\frac{2}{5}$     2)  $2\frac{7}{9}$     3)  $2\frac{2}{9}$

**Drill**

Start



Finish

G-7

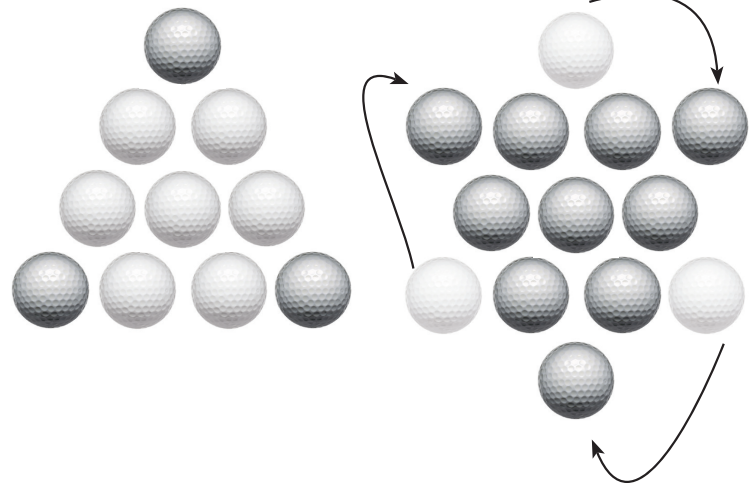
**Concept**

Scale factor is 1:3 or  $\frac{1}{3}$

**Operations**

1)  $3\frac{1}{4}$     2)  $\frac{3}{32}$     3)  $4\frac{4}{15}$

**Drill**



G-8

**Concept**

Scale factor is 8: 1 or  $\frac{8}{1}$

**Operations**

1)  $1\frac{17}{22}$     2)  $5\frac{7}{10}$     3)  $\frac{1}{2}$

**Drill**

They would throw away 250 light bulbs a day.