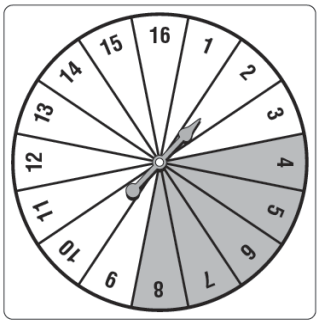
Fractions

Add. Simplify all answers.

1) $\frac{1}{7}+\frac{3}{7}$ 2) $\frac{1}{6}+\frac{1}{2}$ 3) $4\frac{1}{8}+8\frac{11}{16}$ 4) $5\frac{7}{16}+3\frac{1}{16}$

Probability

5) **A spinner like the one shown is used in a game. Determine the theoretical probability of each outcome if the spinner is equally likely to land on each section. Express each theoretical probability as a fraction and as a percent.**



a) P(10) = _____ (fraction) = _____ (percent)

b) P(odd) = _____ (fraction) = _____ (percent)

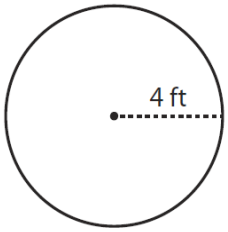
c) P(greater than 7) = _____ (fraction) = _____ (percent)

d) P(prime #) = _____ (fraction) = _____ (percent)

Geometry

For each shape, identify the figure (be specific as possible) and find the **area**. Show all formulas. Use 3 for π.

6)



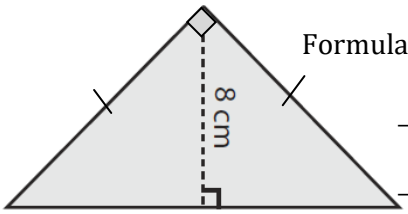
Name: _____

Formula: _____

_____

_____

7)



Name: _____

Formula: _____

_____

_____

Factoring

Find the prime factors, and then write all factor pairs for each number.

	prime factorization	factor pairs
8) **173**	_____	_____
9) **174**	_____	_____

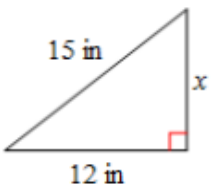
Current Problem Sets

10) Find the missing length of the right triangle. Round answers to the nearest tenth. A calculator can be used.

_____

_____

_____

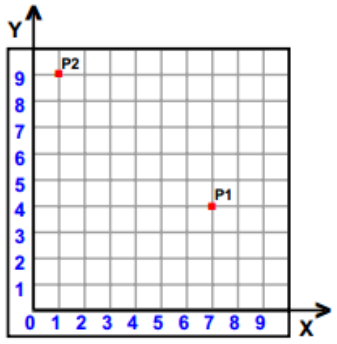


11) Find the distance between the two points. Round to the nearest tenth. A calculator may be used.

_____

_____

_____



Transformations and Similarity UNIT 7 **Warm-Up B**

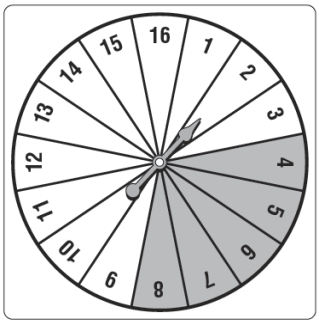
Fractions

Add. Simplify all answers.

1) $4\frac{1}{2} + 6\frac{1}{3}$ 2) $4\frac{2}{5} + 8\frac{1}{2}$ 3) $2\frac{5}{14} + 5\frac{1}{7}$ 4) $6\frac{11}{24} + 4\frac{1}{6}$

Probability

5) **A spinner like the one shown is used in a game. Determine the theoretical probability of each outcome if the spinner is equally likely to land on each section. Express each theoretical probability as a fraction and as a percent.**



a) P(1 or 2) = _____ = _____ (fraction) (percent)

b) P(shaded) = _____ = _____ (fraction) (percent)

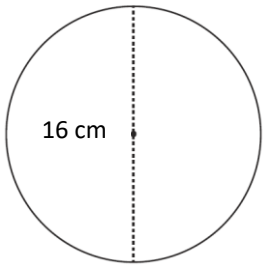
c) P(less than 5) = _____ = _____ (fraction) (percent)

d) P(not shaded) = _____ = _____ (fraction) (percent)

Geometry

For each shape, identify the figure (be specific as possible) and find the **area**. Show all formulas. Use 3 for π.

6)



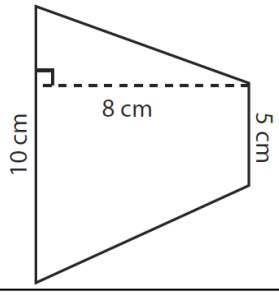
Name: _____

Formula: _____

_____

_____

7)



Name: _____

Formula: _____

_____

_____

Factoring

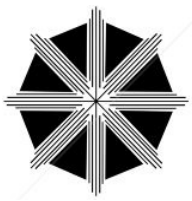
Find the prime factors, and then write all factor pairs for each number.

	prime factorization	factor pairs
8) **175**	_____	_____
9) **176**	_____	_____

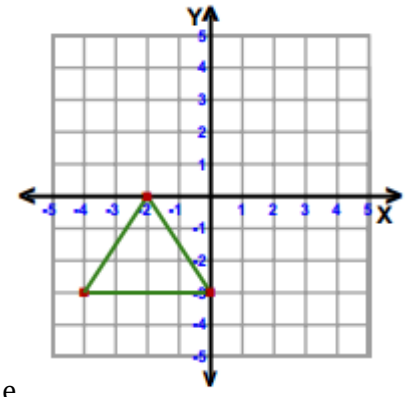
Current Problem Sets

10) Draw the lines of symmetry. State how many lines.

a) _____ b) _____ c) _____



11) Reflect the figure over the x-axis.



Write a general rule for the transformation:

Transformations and Similarity UNIT 7 **Warm-Up C**

Fractions

Add. Simplify all answers.

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

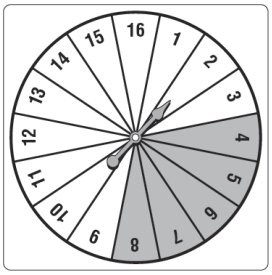
Probability

5) The table shows the results of an experiment in which the spinner shown was spun 50 times. Find the experimental probability of each outcome as a fraction and as a percent.

a) P(less than 7) = _____ = _____

b) P(even) = _____ = _____

c) P(not shaded) = _____ = _____

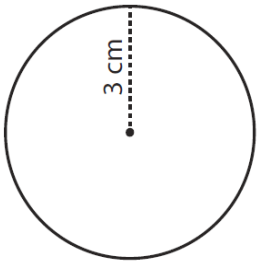


Number	Frequency	Number	Frequency
1	II	9	III
2	III	10	𝍸
3	II	11	II
4	IIII	12	IIII
5	𝍸	13	I
6	𝍸 I	14	II
7	I	15	III
8	II	16	𝍸

Geometry

For each shape, identify the figure (be specific as possible) and find the **area**. Show all formulas. Use 3 for π.

6)



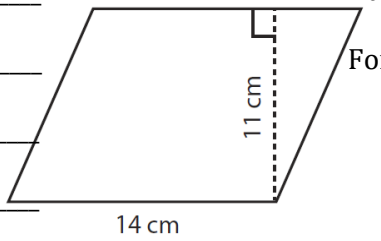
Name: _____

Formula: _____

_____

_____

7)



Name: _____

Formula: _____

_____

_____

Factoring

Find the prime factors, and then write all factor pairs for each number.

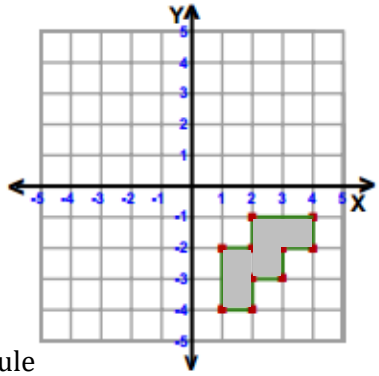
	prime factorization	factor pairs
8) **177**	_____	_____
9) **178**	_____	_____

Current Problem Sets

10) Draw the lines of symmetry. State how many lines.

a) _____ b) _____ c) _____

11) Reflect the figure over the y-axis.



Write a general rule for the transformation:

_____

Transformations and Similarity UNIT 7 **Warm-Up D**

Fractions

Subtract. Simplify all answers.

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

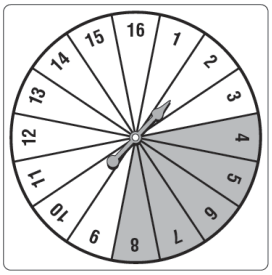
Probability

5) The table shows the results of an experiment in which the spinner shown was spun 50 times. Find the experimental probability of each outcome as a fraction and as a percent.

a) P(13) = _____ = _____

b) P(greater than 12) = _____ = _____

c) P(prime) = _____ = _____

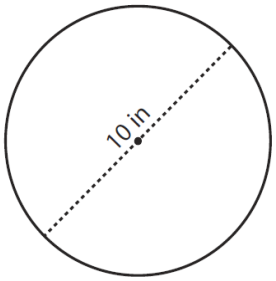


Number	Frequency	Number	Frequency
1	II	9	III
2	III	10	𝍸
3	II	11	II
4	IIII	12	IIII
5	𝍸	13	I
6	𝍸 I	14	II
7	I	15	III
8	II	16	𝍸

Geometry

For each shape, identify the figure (be specific as possible) and find the **area**. Show all formulas. Use 3 for π.

6)



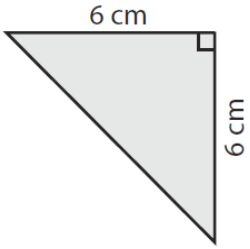
Name: _____

Formula: _____

_____

_____

7)



Name: _____

Formula: _____

_____

_____

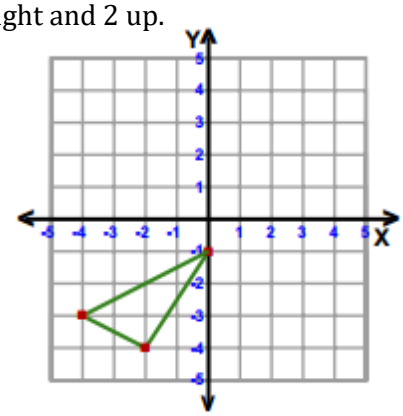
Factoring

Find the prime factors, and then write all factor pairs for each number.

	prime factorization	factor pairs
8) **179**	_____	_____
9) **180**	_____	_____

Current Problem Sets

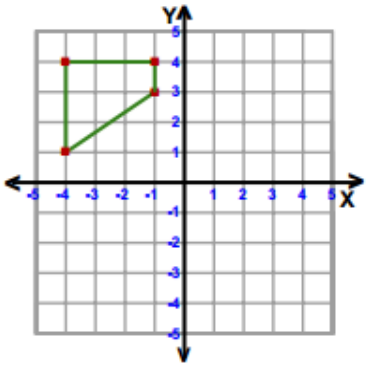
10) Translate the figure 5 right and 2 up.



Write a general rule for the transformation:

_____

11) Reflect the figure over the x-axis.



Write a general rule for the transformation:

_____

Fractions

Subtract. Simplify all answers.

1) $5\frac{9}{10} - 2\frac{1}{2}$ 2) $6\frac{1}{3} - 3\frac{1}{5}$ 3) $7\frac{1}{2} - 3\frac{1}{5}$ 4) $9\frac{2}{3} - 2\frac{1}{5}$

Probability

5) The table shows the students involved in community service. Suppose one student is randomly selected to represent the school at a state-wide awards ceremony. Find the probability of each event. Express your answer as a simplified fraction and round to a whole percent.

Community Service (Two-Way Table)

	6th Graders	7th Graders	8th Graders
Girls	5	3	7
Boys	15	5	5

a) P(boy) = _____ = _____

b) P(not a 6th grader) = _____ = _____

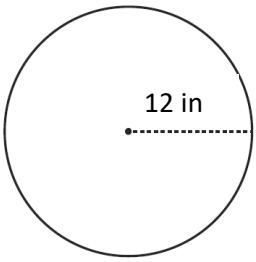
c) P(girl) = _____ = _____

d) P(8th grader) = _____ = _____

Geometry

For each shape, identify the figure (be specific as possible) and find the **area**. Show all formulas. Use 3 for π.

6)



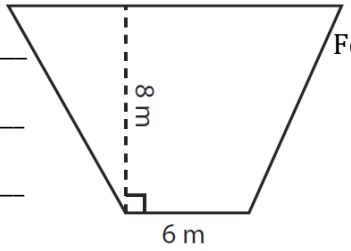
Name: _____

Formula: _____

_____

_____

7)



Name: _____

Formula: _____

_____

_____

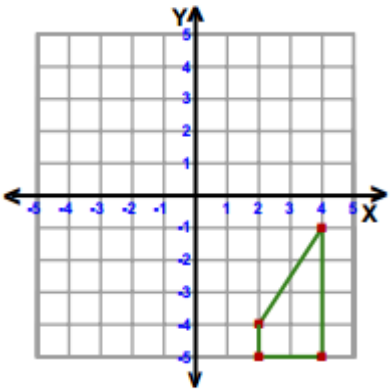
Factoring

Find the prime factors, and then write all factor pairs for each number.

	prime factorization	factor pairs
8) **181**	_____	_____
9) **182**	_____	_____

Current Problem Sets

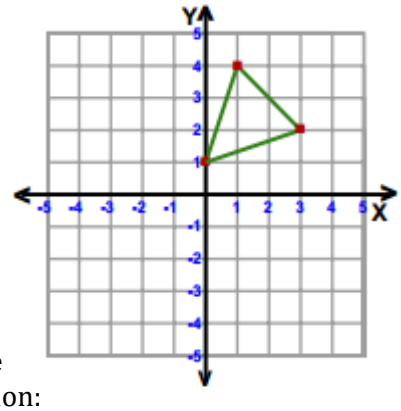
10) Translate the figure 4 left and 3 up.



Write a general rule for the transformation:

_____

11) Reflect the figure over the y-axis.



Write a general rule for the transformation:

_____

Fractions

Subtract. Simplify all answers.

1) $8\frac{1}{2} - 1\frac{1}{4}$ 2) $9\frac{1}{2} - 3\frac{1}{3}$ 3) $6\frac{7}{10} - 3\frac{1}{2}$ 4) $9\frac{2}{3} - 2\frac{2}{5}$

Probability

5) The table shows the students involved in community service. Suppose one student is randomly selected to represent the school at a state-wide awards ceremony. Find the probability of each event. Express your answer as a simplified fraction and round to a whole percent.

Community Service (Two-Way Table)

	6th Graders	7th Graders	8th Graders
Girls	5	3	7
Boys	15	5	5

a) P(boy or girl) = _____ = _____

b) P(6th or 7th grader) = _____ = _____

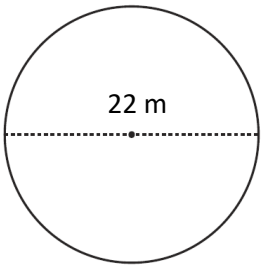
c) P(7th grader) = _____ = _____

d) P(not a 9th grader) = _____ = _____

Geometry

For each shape, identify the figure (be specific as possible) and find the **area**. Show all formulas. Use 3 for π.

6)



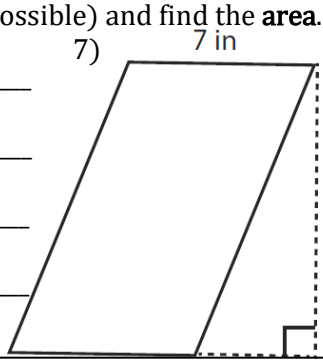
Name: _____

Formula: _____

_____

_____

7)



Name: _____

Formula: _____

_____

_____

Factoring

Find the prime factors, and then write all factor pairs for each number.

	prime factorization	factor pairs
8) **183**	_____	_____
9) **184**	_____	_____

Current Problem Sets

10) For each figure state the order and the angle of rotation.

a)

Order: _____

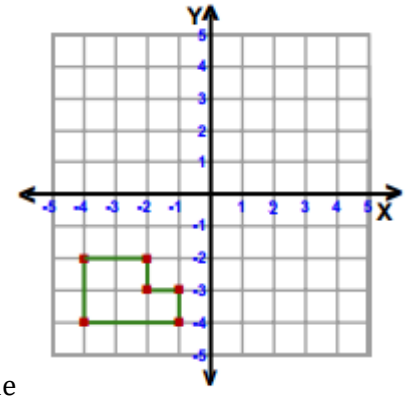
Angle : _____

b)

Order: _____

Angle : _____

11) Rotate the figure 180° about the origin.



Write a general rule for the transformation:

_____

Fractions

Multiply. Cross-cancel if possible. Simplify all answers.

1) $\frac{5}{3} * \frac{2}{5}$ 2) $\frac{3}{4} * \frac{8}{9}$ 3) $\frac{5}{2} * \frac{2}{7}$ 4) $\frac{7}{6} * \frac{9}{11}$

Probability

5) For the situation, make a tree diagram and then identify the sample space. Then give the total number of outcomes.

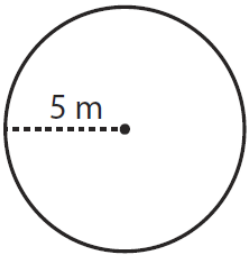
Choosing an outfit from a green shirt, blue shirt, or a red shirt, and black pants or blue pants

Total number of outcomes: _____

Geometry

For each shape, identify the figure (be specific as possible) and find the **area**. Show all formulas. Use 3 for π.

6)



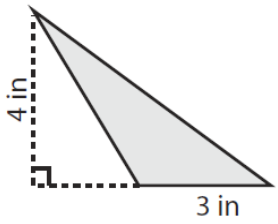
Name: _____

Formula: _____

_____

_____

7)



Name: _____

Formula: _____

_____

_____

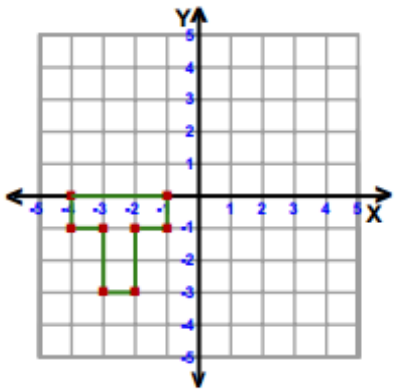
Factoring

Find the prime factors, and then write all factor pairs for each number.

	prime factorization	factor pairs
8) **185**	_____	_____
9) **186**	_____	_____

Current Problem Sets

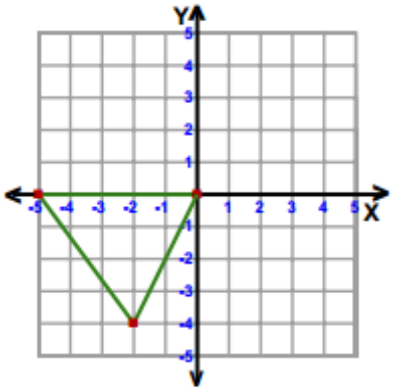
10) Rotate the figure 90° clockwise about the origin.



Write a general rule for the transformation:

_____

11) Rotate the figure 90° counterclockwise about the origin.



Write a general rule for the transformation:

_____

Fractions

Multiply. Cross-cancel if possible. Simplify all answers.

1) $\frac{9}{2} * \frac{1}{18}$ 2) $\frac{8}{9} * \frac{3}{16}$ 3) $\frac{5}{12} * \frac{2}{15}$ 4) $\frac{9}{8} * \frac{14}{15}$

Probability

5) For the situation, make a tree diagram and then identify the sample space. State the total number of outcomes.

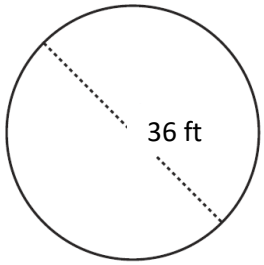
Choosing a vowel from the word COUNT and a consonant from the word PRIME

Total number of outcomes: _____

Geometry

For each shape, identify the figure (be specific as possible) and find the **area**. Show all formulas. Use 3 for π.

6)



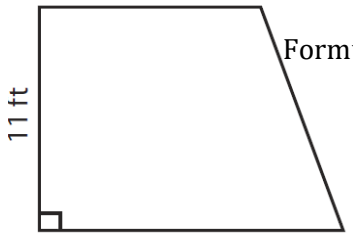
Name: _____

Formula: _____

_____

_____

7)



Name: _____

Formula: _____

_____

_____

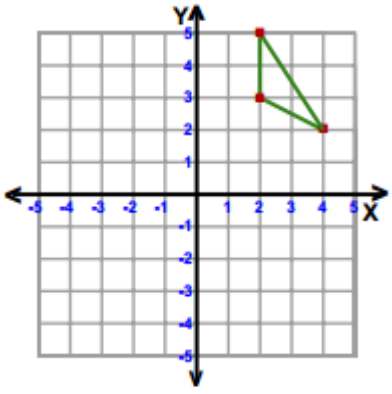
Factoring

Find the prime factors, and then write all factor pairs for each number.

	prime factorization	factor pairs
8) **187**	_____	_____
9) **188**	_____	_____

Current Problem Sets

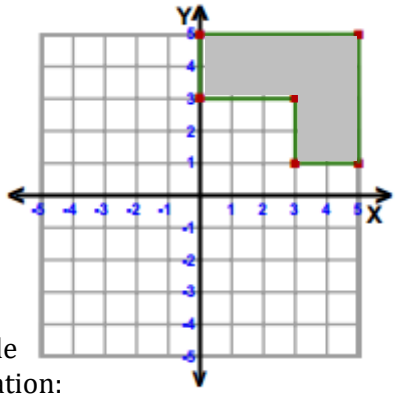
10) Rotate the figure 90° counterclockwise about the origin.



Write a general rule for the transformation:

_____

11) Reflect the figure over the x-axis.



Write a general rule for the transformation:

_____

Transformations and Similarity UNIT 7 **Warm-Up I**

Fractions

Multiply. Cross-cancel if possible. Simplify all answers.

1) $\frac{7}{27} * \frac{6}{7}$ 2) $\frac{8}{15} * \frac{15}{26}$ 3) $\frac{10}{27} * \frac{18}{25}$ 4) $\frac{33}{49} * \frac{7}{11}$

Probability

5) For the situation, make a tree diagram and then identify the sample space. State the total number of outcomes.

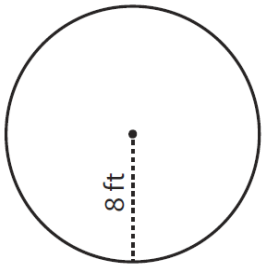
Choosing a vowel from the word BEAUMONT and a consonant from the word COLTS

Total number of outcomes: _____

Geometry

For each shape, identify the figure (be specific as possible) and find the **area**. Show all formulas. Use 3 for π.

6)



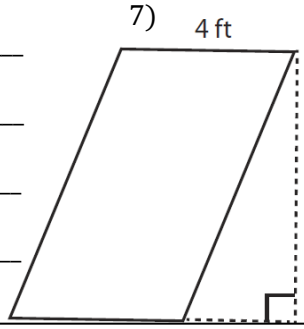
Name: _____

Formula: _____

_____

_____

7)



Name: _____

Formula: _____

_____

_____

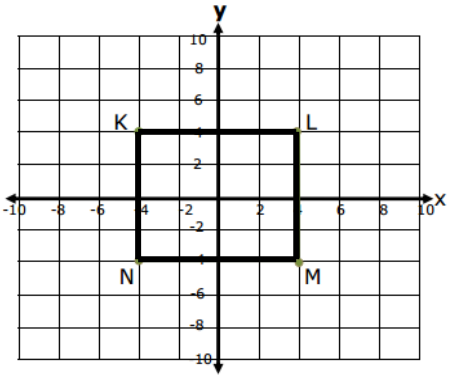
Factoring

Find the prime factors, and then write all factor pairs for each number.

	prime factorization	factor pairs
8) **189**	_____	_____
9) **190**	_____	_____

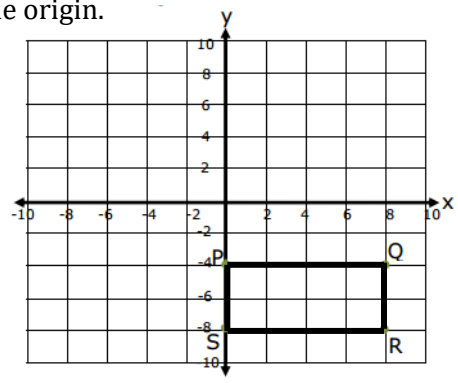
Current Problem Sets

10) Dilate the figure with a scale factor of 2 centered at the origin.



Write a general rule for the transformation:

11) Dilate the figure with a scale factor of $\frac{1}{4}$ centered at the origin.



Write a general rule for the transformation:

Transformations and Similarity UNIT 7 **Warm-Up J**

Fractions

Multiply. Cross-cancel if possible. Simplify all answers.

1) $\frac{24}{35} * \frac{7}{36}$ 2) $\frac{19}{40} * \frac{16}{19}$ 3) $\frac{11}{24} * \frac{16}{55}$ 4) $\frac{12}{13} * \frac{13}{18}$

Probability

5) For the situation, make a tree diagram and then identify the sample space. State the total number of outcomes.

Soup	Salad	Sandwich
Tortellini Lentil	Caesar Macaroni	Roast Beef Ham Turkey

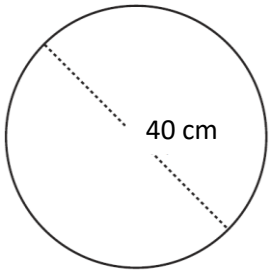
Choosing a lunch consisting of a soup, salad, and sandwich from the menu shown in the table.

Total number of outcomes: _____

Geometry

For each shape, identify the figure (be specific as possible) and find the **area**. Show all formulas. Use 3 for π.

6)



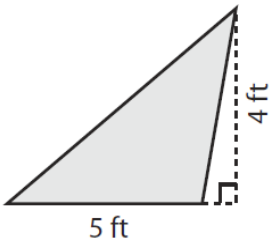
Name: _____

Formula: _____

_____

_____

7)



Name: _____

Formula: _____

_____

_____

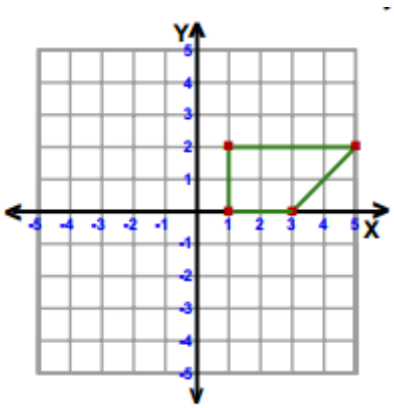
Factoring

Find the prime factors, and then write all factor pairs for each number.

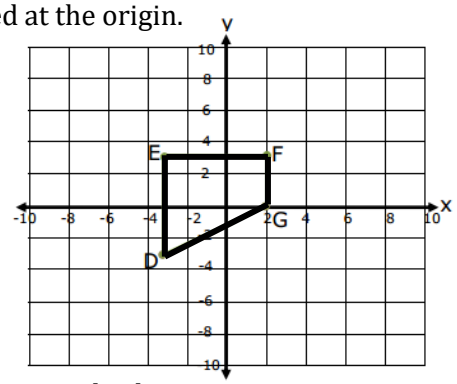
	prime factorization	factor pairs
8) **191**	_____	_____
9) **192**	_____	_____

Current Problem Sets

10) Translate the figure down 3 and to the left 1. Then reflect over the y-axis.



11) Dilate the figure with a scale factor of 3 centered at the origin.



Write a general rule for the transformation: