

Final REVIEW MC

Date _____ Period _____

Solve each equation by factoring.

1) $x^2 + 6x + 8 = 0$

- A) $\{4, -2\}$ B) $\{4, -7\}$
 C) $\{6, 1\}$ D) $\{-4, -2\}$

2) $p^2 + 6p + 5 = 0$

- A) $\{5, -5\}$ B) $\{-1, -4\}$
 C) $\{-1, -5\}$ D) $\{6, 5\}$

3) $x^2 + 5x = 0$

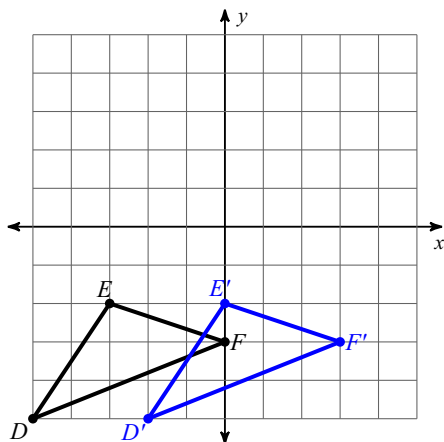
- A) $\{-5, 0\}$ B) $\{-7, -5\}$
 C) $\{5, 0\}$ D) $\{-3, -6\}$

4) $6x^2 + 11x + 5 = 0$

- A) $\left\{-\frac{5}{6}, -1\right\}$ B) $\left\{-\frac{5}{6}, 7\right\}$
 C) $\left\{\frac{4}{7}, -8\right\}$ D) $\left\{\frac{5}{6}, 1\right\}$

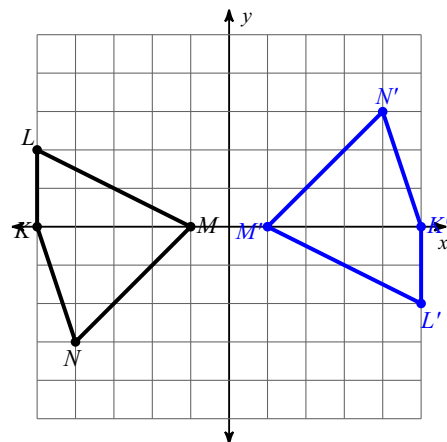
Write a rule to describe each transformation.

5)



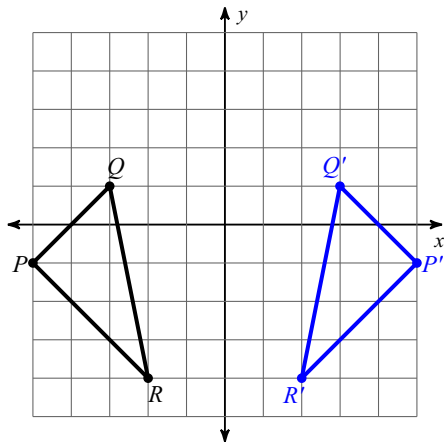
- A) dilation of 0.5
 B) translation: 2 units right and 7 units up
 C) translation: 3 units right
 D) translation: 7 units up

6)



- A) dilation of $\frac{1}{2}$
 B) translation: 1 unit up
 C) rotation 180° about the origin
 D) rotation 270° clockwise about the origin

7)



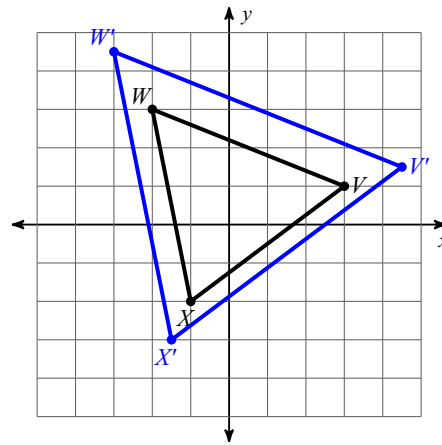
- A) reflection across $y = -x$
- B) reflection across the y -axis
- C) rotation 90° counterclockwise about the origin
- D) rotation 180° about the origin

Use the information provided to write the standard form equation of each circle.

- 9) Center: $(-11, 3)$
Radius: 4

- A) $(x + 11)^2 + (y - 3)^2 = 16$
- B) $(x + 11)^2 + (y - 3)^2 = 1$
- C) $(x - 10)^2 + (y + 2)^2 = 16$
- D) $(x + 11)^2 + (y - 3)^2 = 256$

8)



- A) reflection across $y = -x$
- B) translation: 2 units up
- C) dilation of 1.5
- D) rotation 180° about the origin

Use the information provided to write the standard form equation of each circle. (Complete the Square)

11) $x^2 + y^2 + 22x - 18y + 166 = 0$

- A) $(x + 11)^2 + (y - 9)^2 = 36$
- B) $(x - 11)^2 + (y - 9)^2 = 1296$
- C) $(x - 11)^2 + (y + 9)^2 = 36$
- D) $(x + 7)^2 + (y - 11)^2 = 36$

12) $x^2 + y^2 + 28x - 18y + 268 = 0$

- A) $(x - 14)^2 + (y - 9)^2 = 9$
- B) $(x + 9)^2 + (y + 14)^2 = 9$
- C) $(x + 14)^2 + (y - 9)^2 = 9$
- D) $(x + 14)^2 + (y - 9)^2 = 81$

Find the Center and Radius.

13) $(x - 15)^2 + (y + 16)^2 = 9$

- A) $C(-15, 16)$, $r = 3$
- B) $C(-15, -16)$, $r = 3$
- C) $C(15, -16)$, $r = 81$
- D) $C(15, -16)$, $r = 3$

Convert each degree measure into radians and each radian measure into degrees.

14) $\frac{\pi}{6}$

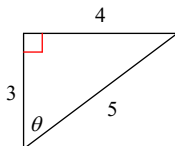
- A) 60°
- B) 25°
- C) 40°
- D) 30°

15) 45°

- A) $\frac{5\pi}{18}$
- B) $\frac{\pi}{4}$
- C) $\frac{5\pi}{9}$
- D) $\frac{11\pi}{36}$

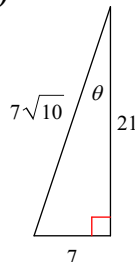
Find the value of the trig function indicated.

16) $\tan \theta$



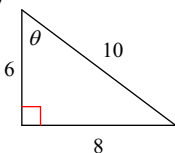
- A) $\frac{3}{5}$ B) $\frac{4}{3}$
 C) $\frac{5}{4}$ D) $\frac{5}{3}$

17) $\cos \theta$



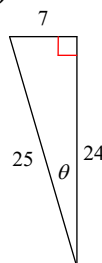
- A) $\frac{1}{3}$ B) $\frac{\sqrt{10}}{10}$
 C) $\frac{\sqrt{10}}{3}$ D) $\frac{3\sqrt{10}}{10}$

18) $\sin \theta$



- A) $\frac{4}{5}$ B) $\frac{5}{3}$
 C) $\frac{4}{3}$ D) $\sqrt{2}$

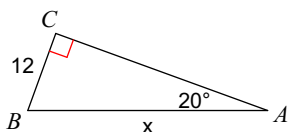
19) $\sin \theta$



- A) $\frac{24}{25}$ B) $\sqrt{5}$
 C) $\frac{24}{7}$ D) $\frac{7}{25}$

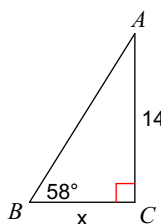
Find the measure of each side indicated. Round to the nearest tenth.

20)



- A) 38.1 B) 41.1
 C) 35.1 D) 37.7

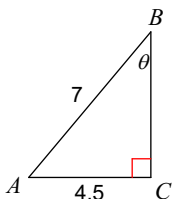
21)



- A) 11 B) 7.3
 C) 8.7 D) 10.1

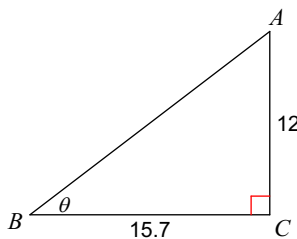
Find the measure of each angle indicated. Round to the nearest tenth.

22)



- A) 50.9° B) 44.6°
 C) 40° D) 47.7°

23)



- A) 37.4° B) 39.6°
 C) 44.4° D) 37.9°