Name_____ ID: 1

Spiral Review #4

Date_____ Period_____

Simplify.

1) $\sqrt{486}$

2) $\sqrt{192}$

3) $2\sqrt{162}$

4) $6\sqrt{252}$

5) $\sqrt{30} \cdot \sqrt{18}$

6) $6\sqrt{3} \cdot 5\sqrt{15}$

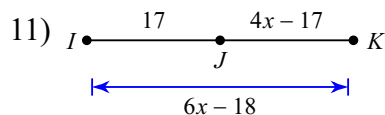7) $\dfrac{3\sqrt{8}}{5\sqrt{36}}$

8) $\dfrac{5\sqrt{5}}{2\sqrt{20}}$

Simplify - rationalizing the denominator is required.
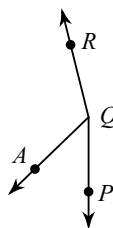
9) $\dfrac{2\sqrt{12}}{\sqrt{20}}$

10) $\dfrac{\sqrt{2}}{3\sqrt{3}}$

Use the Segment Addition Postulate to set up and solve an equation to find the value of *x*.
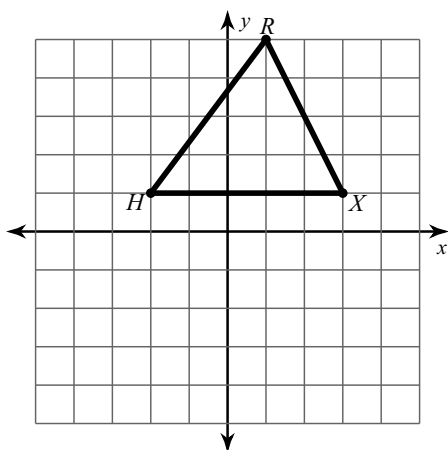
11)

$$I \bullet \underset{\underset{J}{\bullet}}{\overset{17}{\rule{3cm}{0.4pt}}} \overset{4x-17}{\rule{3cm}{0.4pt}} \bullet K$$

$$\underset{6x-18}{\overset{\longleftrightarrow}{}}$$

Use the Angle Addition Postulate to set up and solve an equation to find *x*.

12) $m\angle PQR = 166°$, $m\angle AQR = 14x - 6$, and $m\angle PQA = 6x - 8$. Find x.

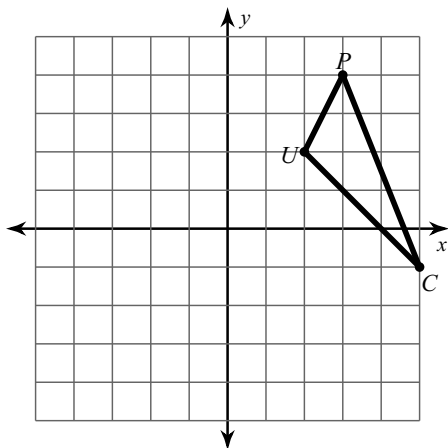**Graph the image of the figure using the translation given.**

13) translation: 2 units right and 5 units down

14) Find the area of triangle HRX. Round your answer to the nearest hundredth, if necessary.

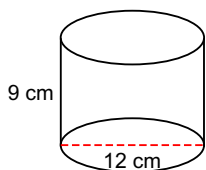**Graph the image of the figure using the translation given.**

15) translation: 3 units left and 4 units down

16) Find the perimeter of the image of triangle CPU. Round your answer to the nearest hundredth, if necessary.

Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.

17)

9 cm

12 cm

18)

9 in

12 in

7 in

12 in

9 in