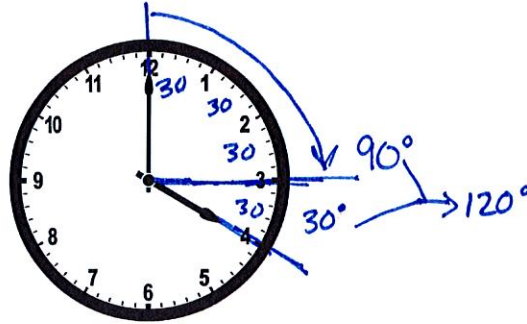


Name Key

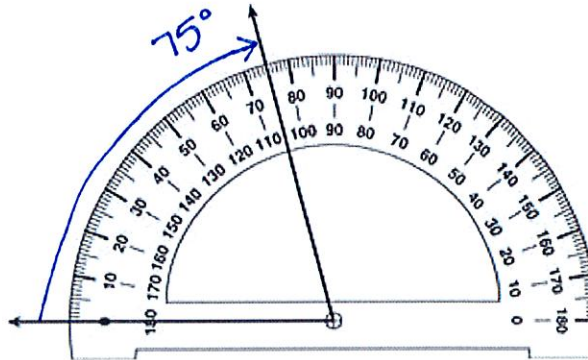
NC.4.MD.6 CFA (Cluster 8)

1. The time on the clock below is 4:00. If the hands of the clock were extended, they would intersect the edge of the clock. The arc formed by these two hands would be  $\frac{2}{6}$  of the full circle.



What angle is formed by the hands of the clock?

- a.  $40^\circ$
  - b.  $90^\circ$
  - c.  $120^\circ$
  - d.  $180^\circ$
2. What is the measure of the angle shown on the protractor?



- a.  $115^\circ$
- b.  $105^\circ$
- c.  $85^\circ$
- d.  $75^\circ$

3. A garden sprinkler rotates  $40^\circ$  every 15 seconds. How long does it take the sprinkler to rotate  $360^\circ$ ?

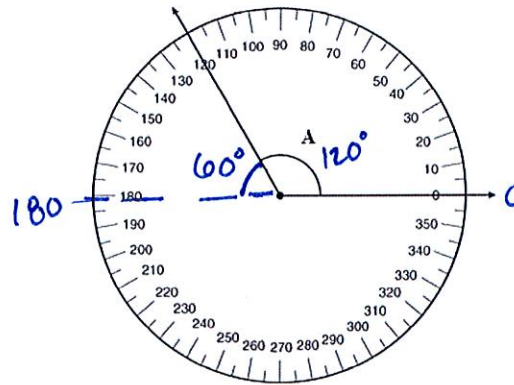
- a. 1 minute
- b. 2 minutes 15 seconds
- c. 2 minutes 25 seconds
- d. 10 minutes

$$\begin{array}{r} 40^\circ \\ \times 9 \\ \hline 360^\circ \end{array}$$

$$\begin{array}{r} 15 \text{ min} \\ \times 9 \\ \hline 135 \text{ min} \end{array}$$

$$2 \text{ hr} = 120 \text{ min} + 15 \text{ min} = 135 \text{ min}$$

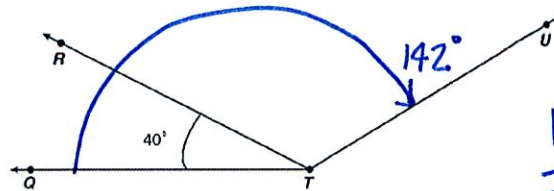
4. Which of the following statements is true about Angle A?



- a. Both Angle A and the smaller arc on the circle measure  $120^\circ$
- b. Both Angle A and the larger arc on the circle measure  $240^\circ$
- c. Both Angle A and the smaller arc on the circle measure  $0^\circ$
- d. Both Angle A and the smaller arc on the circle measure  $240^\circ$

$$180^\circ$$

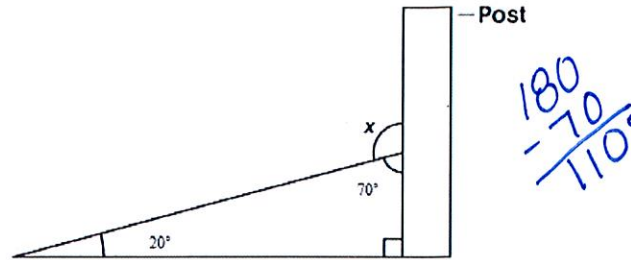
5. A video surveillance camera turned  $40^\circ$  and paused before continuing to turn. If the camera turned a total of  $142^\circ$ , how many degrees did the camera turn on the second rotation?



$$\begin{array}{r} 142 \\ - 40 \\ \hline 102^\circ \end{array}$$

- a.  $182^\circ$
- b.  $180^\circ$
- c.  $102^\circ$
- d.  $100^\circ$

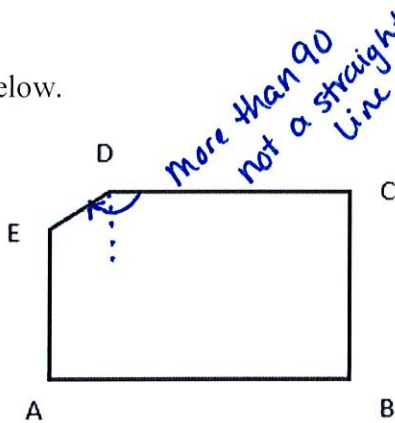
6. A museum is building a ramp to make the building wheelchair and stroller accessible. The ramp will have a  $20^\circ$  incline. The contractor knows that the measure for one angle of the post should be  $70^\circ$ . He needs to determine the measure of the missing angle,  $x$ , to make sure that the post for the handrail is straight, at  $180^\circ$ .



Which should be the value of  $x$ , the measure of the missing angle, to make sure the post for the handrail is straight?

- a.  $90^\circ$
- b.  $100^\circ$
- c.  $110^\circ$
- d.  $180^\circ$

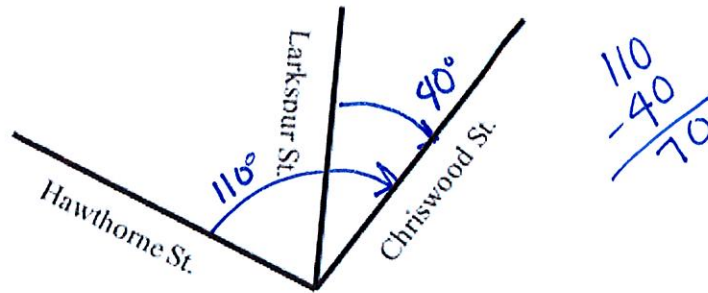
7. Jasmine drew the figure below.



Which measurement is closest to the measure of  $\angle D$ ?

- a.  $45^\circ$
- b.  $90^\circ$
- c.  $150^\circ$
- d.  $175^\circ$

8. The figure below shows the intersection of streets. Hawthorne St. intersects Chriswood St. at a  $110^\circ$  angle. Chriswood St. intersects Larkspur St. at a  $40^\circ$  angle.



At what angle does Hawthorne St. intersect Larkspur St.?

- a.  $70^\circ$
  - b.  $80^\circ$
  - c.  $140^\circ$
  - d.  $150^\circ$
- Too much!*

9. A fan moves in a left to right motion before going back from right to left. The fan rotates five degrees each second. If the fan rotated a total of 145 degrees, how many 5 degree turns did the fan make in all?

- a. 29
- b. 140
- c. 290
- d. 360

$$\begin{array}{r} 5 \overline{) 145} \\ \underline{100} \phantom{0} \\ 45 \phantom{0} \\ \underline{45} \\ 0 \end{array} \quad \begin{array}{r} 20 \\ 9 \\ \hline 29 \end{array}$$

10. At the carnival, a Ferris wheel rotates small angles to load and dismount passengers. If the Ferris wheel has rotated 340 degrees already, how many degrees remain to make a full rotation?

- a.  $360^\circ$
- b.  $200^\circ$
- c.  $150^\circ$
- d.  $20^\circ$

*360 total*  
*start @ 340*  
*20 more to get to 360*

# ANSWER KEY

1. C
2. D
3. B
4. A
5. C
6. C
7. C
8. A
9. A
10. D