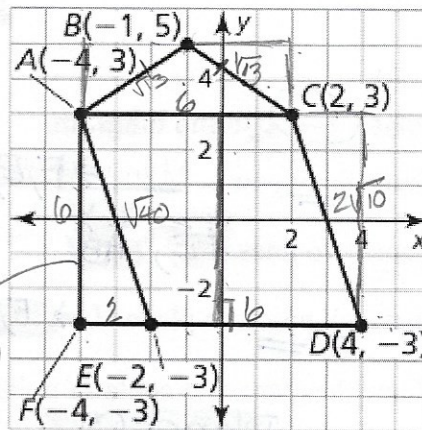


1.4

In Exercises 6–10, use the diagram.

$AB \neq BC = \sqrt{2^2 + 3^2} = \sqrt{4+9} = \sqrt{13}$
 $BC = \sqrt{13}$
 $AB \Rightarrow$
 $AE = CD = \sqrt{2^2 + 6^2} = \sqrt{4+36} = \sqrt{40} = 4 \cdot 10 = 2\sqrt{10}$



6. Find the perimeter of $\triangle ABC = 2\sqrt{13} + 6 \approx 13.21$

7. Find the perimeter of quadrilateral ACDE. $= 4\sqrt{10} + 12 \approx 24.65$

8. Find the area of $\triangle ABC$. $A = \frac{1}{2}(6)(6) = 6 \text{ sq units}$

9. Find the area of quadrilateral ACDE. $A = (6)(6) = 36 \text{ sq units}$

10. Find the area of pentagon ABCDE. $A = 6 + 36 + 6 = 48 \text{ sq units}$

1.5

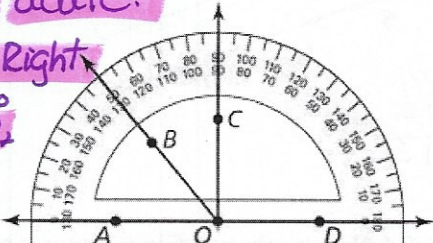
In Exercises 1–4, find the angle measure. Then classify the angle.

1. $m\angle AOB = 50^\circ$, acute.

2. $m\angle COD = 90^\circ$, Right

Obtuse 3. $m\angle BOD = 150^\circ$

4. $m\angle AOD = 180^\circ$, Straight.

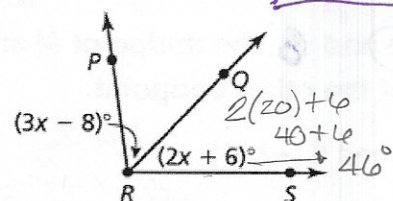
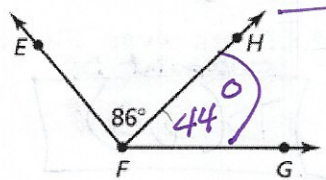


In Exercises 5–8, find the indicated angle measure.

5. $m\angle EFG = 130^\circ$. Find $m\angle HFG = 44^\circ$

6. $m\angle PRS = 98^\circ$. Find $m\angle QRS = 46^\circ$

130
 $- 86$
 $\hline 44$



$3x - 8 + 2x + 6 = 98$
 $5x - 2 = 98$
 $5x = 100$
 $x = 20$

1.6

In Exercises 4 and 5, find the angle measure.

4. $\angle 1$ is a complement of $\angle 2$, and $m\angle 2 = 71^\circ$. Find $m\angle 1 = 19^\circ$

5. $\angle 3$ is a supplement of $\angle 4$, and $m\angle 4 = 26.7^\circ$. Find $m\angle 3 = 153.3^\circ$

In Exercises 6 and 7, find the measure of each angle.

6. $\angle ABC$ and $\angle CBD$ are supplementary angles, $m\angle ABC = 7x^\circ$ and $m\angle CBD = 8x^\circ$. $7x + 8x = 180$
 $15x = 180$
 $x = 12$

$7(12) = 84$
 $m\angle ABC = 84^\circ$
 $8(12) = 96$
 $m\angle CBD = 96^\circ$

7. $\angle WXY$ and $\angle YXZ$ are complementary angles, $m\angle WXY = (2x + 5)^\circ$

$8(9) - 5 = 67$
 $72 - 5 = 67$

and $m\angle YXZ = (8x - 5)^\circ + 2x + 5 = 90$
 $10x = 90$
 $x = 9$

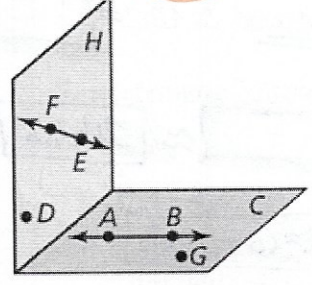
$2(9) + 5 = 23$
 $m\angle WXY = 23^\circ$

CHAPTER 1 TEST REVIEW

1.1

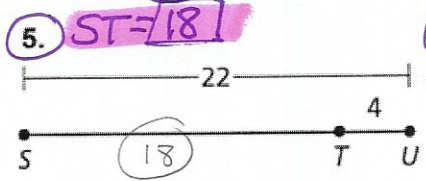
In Exercises 1-4, use the diagram.

- Name three points. Many → F, E, D, A, B, G.
- Name two lines. FE, AB
- Name all points in plane H. → F, E, D.
- Name the plane that contains points A, B, and G. Plane C.

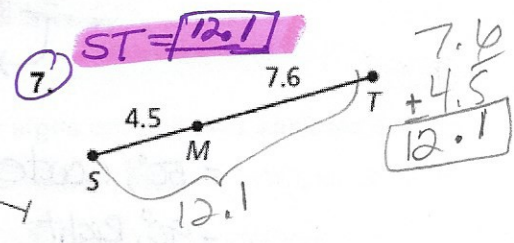
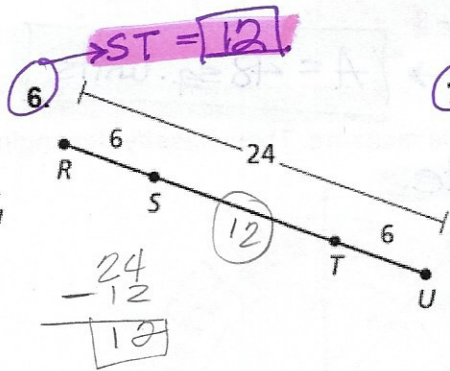


1.2

In Exercises 5-7, find ST.



$$\begin{array}{r} 22 \\ -4 \\ \hline 18 \end{array}$$



1.3

In Exercises 7 and 8, the endpoints of \overline{LN} are given. Find the coordinates of the midpoint M.

7. L(2, 1) and N(2, 13)

$$x = \frac{2+2}{2} = \frac{4}{2} = 2$$

$$y = \frac{1+13}{2} = \frac{14}{2} = 7$$

Midpt. M(2, 7)

In Exercises 9 and 10, the midpoint M and one endpoint of \overline{CD} are given. Find the coordinates of the other endpoint.

9. M(1, 2) and C(-1, 4)

$$1 = \frac{x-1}{2} \Rightarrow 2 = x-1 \Rightarrow x = 3$$

$$2 = \frac{y+4}{2} \Rightarrow 4 = y+4 \Rightarrow y = 0$$

endpoint D. D(3, 0)

In Exercises 11 and 12, find the distance between the two points.

11. A(1, 7) and B(4, 6)

AB = $\sqrt{10}$

$$d = \sqrt{(4-1)^2 + (7-6)^2}$$

$$= \sqrt{3^2 + 1^2}$$

$$= \sqrt{9+1}$$

AB = $\sqrt{10}$

12. G(-1, -5) and H(3, -8)

GH = 5

$$d = \sqrt{(3-(-1))^2 + (-8-(-5))^2}$$

$$= \sqrt{4^2 + (-3)^2}$$

$$= \sqrt{16+9}$$

$$= \sqrt{25}$$

GH = 5