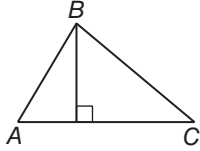


3-6 Skills Practice

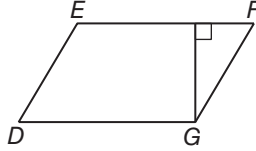
Perpendiculars and Distance

Construct the segment that represents the distance indicated.

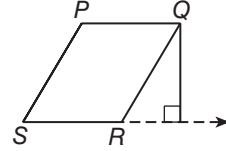
1. B to \overleftrightarrow{AC}



2. G to \overleftrightarrow{EF}



3. Q to \overleftrightarrow{SR}



COORDINATE GEOMETRY Find the distance from P to ℓ .

4. Line ℓ contains points $(0, -2)$ and $(6, 6)$. Point P has coordinates $(-1, 5)$.

5

5. Line ℓ contains points $(2, 4)$ and $(5, 1)$. Point P has coordinates $(1, 1)$.

$2\sqrt{2}$

6. Line ℓ contains points $(-4, -2)$ and $(2, 0)$. Point P has coordinates $(3, 7)$.

$2\sqrt{10}$

7. Line ℓ contains points $(-7, 8)$ and $(0, 5)$. Point P has coordinates $(-5, 32)$.

$3\sqrt{58}$

Find the distance between each pair of parallel lines with the given equations.

8. $y = 7$
 $y = -1$

8

9. $x = -6$
 $x = 5$

11

10. $y = 3x$
 $y = 3x + 10$

$\sqrt{10}$

11. $y = -5x$
 $y = -5x + 26$

$\sqrt{26}$

12. $y = x + 9$
 $y = x + 3$

$3\sqrt{2}$

13. $y = -2x + 5$
 $y = -2x - 5$

$2\sqrt{5}$