

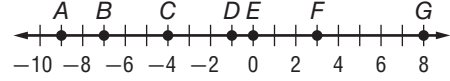
Distance Formula Worksheet

DISTANCE

Exercises

Use the number line to find each measure.

- | | |
|---------|---------|
| 1. BD | 2. DG |
| 3. AF | 4. EF |
| 5. BG | 6. AG |
| 7. BE | 8. DE |



Distance Formula:

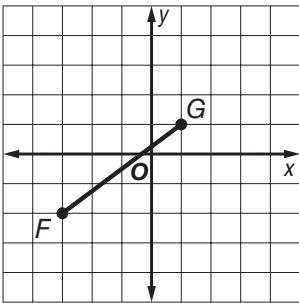
$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

Find the distance between each pair of points.

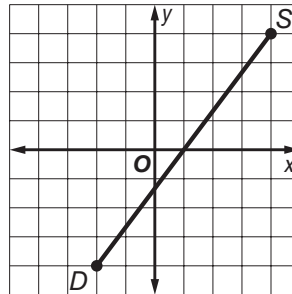
- | | |
|---------------------------|---------------------------|
| 9. $A(0, 0), B(6, 8)$ | 10. $R(-2, 3), S(3, 15)$ |
| 11. $M(1, -2), N(9, 13)$ | 12. $E(-12, 2), F(-9, 6)$ |
| 13. $X(0, 0), Y(15, 20)$ | 14. $O(-12, 0), P(-8, 3)$ |
| 15. $C(11, -12), D(6, 2)$ | 16. $K(-2, 10), L(-4, 3)$ |

Find the distance between each pair of points.

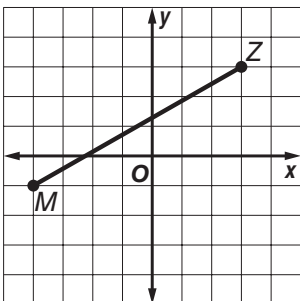
17.



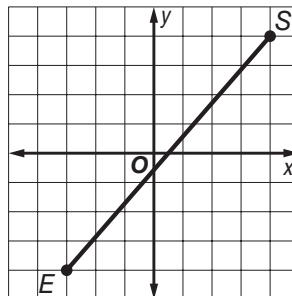
18.



19.



20.



21.

PERIMETER The coordinates of the vertices of a quadrilateral are $R(-1, 3)$, $S(3, 3)$, $T(5, -1)$, and $U(-2, -1)$. Find the perimeter of the quadrilateral. Round to the nearest tenth.

Find the distance between the points listed. Use the results to find the distance from the pitcher's rubber to the home plate in baseball.

- | | |
|------------------------------|------------------------------|
| 1. $(-2, -3)$ and $(-2, 4)$ | 6. $(-2, 6)$ and $(-10, -9)$ |
| 2. $(-7, 5)$ and $(1, -1)$ | 7. $(2, -12)$ and $(7, 0)$ |
| 3. $(-2, 3)$ and $(3, -2)$ | 8. $(3, -2)$ and $(5, -3)$ |
| 4. $(-6, -2)$ and $(-7, -5)$ | 9. $(-4, 5)$ and $(8, -4)$ |
| 5. $(-2, -1)$ and $(-5, -5)$ | |

7	$\sqrt{5}$	13	15	5	$\sqrt{10}$	17	10	$5\sqrt{2}$
C	E	F	H	I	N	S	T	X

