Name_____ Date_____ Period_____

**LESSON 7-6 · SESSION 2 · PREREQUISITE PRACTICE B · SKILL 1 OF 2**

# Find Distance on a Grid

Builds on Lesson 7-6 Session 1 · 6.NS.C.8

| | |
|---|---|
| **TODAY'S LESSON** | Tariq rides from (−9, 5) to (−9, −8). Jada rides to (6, 5). Find both distances first. |
| **YOU NEED TO** | Find the distance between two points with the same x or the same y. **You will use it in Practice Form A, problems 3 and 6.** |

## STEPS TO FOLLOW

*use these same steps on every problem*

1. Find the coordinate that is the **same**.
2. Use the coordinates that **change**.
3. Same signs: **subtract** absolute values. Different signs: add.

## WATCH ME

*the steps in action*

**Find the distance from (−9, 5) to (−9, −8).**

**Step 1** x is the same: −9.

**Step 2** y changes: 5 and −8.

**Step 3** Different signs: 5 + 8 = 13.

**Answer** **13 units**

## TRY IT WITH HELP

*fill in each step*

**1.** Find the distance from (−9, 5) to (6, 5).

**Step 1** The _____ is the same.

**Step 2** x changes: _____ and _____

**Step 3** Different signs: 9 + 6 = _____

**2.** Find the distance from (−11, 12) to (−11, 3).

**Step 1** The _____ is the same.

**Step 2** y changes: _____ and _____

**Step 3** Same signs: 12 − 3 = _____

## YOUR TURN

*use the steps on your own*

**3.** Find each distance.

**a.** (5, −3) and (5, −15) _____

**b.** (−4, 1) and (6, 1) _____

**c.** (3, −8) and (3, −2) _____

**d.** (−2, −15) and (10, −15) _____

# Compare Distances from Zero

Builds on Lesson 7-3 Session 1 · 6.NS.C.7c

| | |
|---|---|
| **TODAY'S LESSON** | Stops at (0, 12) and (0, −9): which is farther from the depot at (0, 0)? |
| **YOU NEED TO** | Compare how far numbers are from 0, like −9 and 4. **You will use it in Practice Form A, problem 8.** |

## STEPS TO FOLLOW

*use these same steps on every problem*

1. Find the **absolute value** of each number.
2. **Compare** the absolute values.
3. The bigger absolute value is **farther** from 0.

## WATCH ME

*the steps in action*

**Which is farther from 0: 12 or −9?**

**Step 1** |12| = 12 and |−9| = 9.

**Step 2** 12 > 9.

**Step 3** 12 is farther from 0.

**Answer** **12**

## TRY IT WITH HELP

*fill in each step*

**4.** Which is farther from 0: −7 or 5?

**Step 1** |−7| = _____ and |5| = _____

**Step 2** _____ > _____

**Step 3** _____ is farther from 0.

**5.** Which is farther from 0: 4 or −9?

**Step 1** |4| = _____ and |−9| = _____

**Step 2** _____ > _____

**Step 3** _____ is farther from 0.

## YOUR TURN

*use the steps on your own*

**6.** Which is farther from 0?

**a.** −3 or 2 _____

**b.** 8 or −10 _____

**c.** −6 or 6 _____

**d.** 1.5 or −0.5 _____

## READY CHECK

*a problem like the one in today's lesson*

**7.** A depot is at (0, 0). Stops are at (0, −11), (0, 6) and (0, −3). Which is closest?

**A** (0, −11)

**B** (0, 6)

**C** (0, −3)

**D** They are the same distance.

**CHECK YOURSELF** ☐ I can do this on my own ☐ I need a little help ☐ I have a question about #____