

Name the property of equality that justifies a step

NAME	DATE	SCORE / 10
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1 Ben solved an equation in three lines.

Line 1: $7x - 1 = 34$

Line 2: $7x = 35$

Line 3: $x = 5$

What did Ben do to both sides to get from line 1 to line 2?

- ☐ Divide both sides by 7
 ☐ Subtract 1 from both sides
 ☐ Add 1 to both sides
☐ Multiply both sides by 7

2 Leo solved an equation in three lines.

Line 1: $x \div 3 + 1 = 0$

Line 2: $x \div 3 = -1$

Line 3: $x = -3$

What did Leo do to both sides to get from line 2 to line 3?

- ☐ Subtract 1 from both sides
 ☐ Divide both sides by 3
 ☐ Multiply both sides by 3
☐ Add 1 to both sides

3 Leo solved an equation in three lines.

Line 1: $2(x + 4) = 4$

Line 2: $x + 4 = 2$

Line 3: $x = -2$

What did Leo do to both sides to get from line 2 to line 3?

- ☐ Subtract 4 from both sides
 ☐ Add 4 to both sides
 ☐ Multiply both sides by 2
☐ Divide both sides by 2

4 Ben solved an equation in three lines.

Line 1: $9x - 13 = 68$

Line 2: $9x = 81$

Line 3: $x = 9$

What did Ben do to both sides to get from line 2 to line 3?

- ☐ Divide both sides by 9 ☐ Add 13 to both sides ☐ Multiply both sides by 9
☐ Subtract 13 from both sides
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5 Ana solved an equation in three lines.

Line 1: $7x + 1 = 29$

Line 2: $7x = 28$

Line 3: $x = 4$

What did Ana do to both sides to get from line 1 to line 2?

- ☐ Divide both sides by 7 ☐ Add 1 to both sides ☐ Multiply both sides by 7
☐ Subtract 1 from both sides
-

6 Ben solved an equation in three lines.

Line 1: $9x - 11 = -92$

Line 2: $9x = -81$

Line 3: $x = -9$

What did Ben do to both sides to get from line 1 to line 2?

- ☐ Divide both sides by 9 ☐ Multiply both sides by 9 ☐ Add 11 to both sides
☐ Subtract 11 from both sides

7 Leo solved an equation in three lines.

Line 1: $8(x + 3) = -24$

Line 2: $x + 3 = -3$

Line 3: $x = -6$

What did Leo do to both sides to get from line 1 to line 2?

- ☐ Subtract 3 from both sides ☐ Multiply both sides by 8 ☐ Divide both sides by 8
☐ Add 3 to both sides

8 Ivy solved an equation in three lines.

Line 1: $x \div 7 + 11 = 2$

Line 2: $x \div 7 = -9$

Line 3: $x = -63$

What did Ivy do to both sides to get from line 1 to line 2?

- ☐ Add 11 to both sides ☐ Subtract 11 from both sides ☐ Divide both sides by 7
☐ Multiply both sides by 7

9 Ana solved an equation in three lines.

Line 1: $7(x + 13) = 140$

Line 2: $x + 13 = 20$

Line 3: $x = 7$

What did Ana do to both sides to get from line 2 to line 3?

- ☐ Add 13 to both sides ☐ Subtract 13 from both sides ☐ Divide both sides by 7
☐ Multiply both sides by 7

10 Ana solved an equation in three lines.

Line 1: $6x - 11 = -17$

Line 2: $6x = -6$

Line 3: $x = -1$

What did Ana do to both sides to get from line 1 to line 2?

- ☐ Subtract 11 from both sides ☐ Divide both sides by 6 ☐ Multiply both sides by 6
☐ Add 11 to both sides

Name the property of equality that justifies a step

1 Add 1 to both sides

3 Subtract 4 from both sides

5 Subtract 1 from both sides

7 Divide both sides by 8

9 Subtract 13 from both sides

2 Multiply both sides by 3

4 Divide both sides by 9

6 Add 11 to both sides

8 Subtract 11 from both sides

10 Add 11 to both sides