

## 2.2 Solving Simple Equations

Name \_\_\_\_\_

Solve each equation and check your solutions.	
<b>1.</b> $x + 9 = 5$ Check:	<b>2.</b> $y + 3 = -10$ Check:
<b>3.</b> $x - 3 = 16$ Check:	<b>4.</b> $m - 9 = 4$ Check:
<b>5.</b> $9 = x + 2$ Check:	<b>6.</b> $-8 = x + 4$ Check:
<b>7.</b> $8 = -5 + x$ Check:	<b>8.</b> $12 = 5 + a$ Check:
Answers: 1. -4; 3. 19; 5. 7; 7. 13	

Solve each equation and check your solutions.

**9.**  $x - 5.6 = -3.2$

Check:

**10.**  $y - 51.9 = -4.6$

Check:

**11.**  $-5 = p + 4.3$

Check:

**12.**  $-9 = y + 1.5$

Check:

**13.**  $4.3 + m = 4.3$

Check:

**14.**  $-2 + x = -2$

Check:

Answers: **9.** 2.4; **11.** -9.3 **13.** 0

Solve each equation and check your solutions.	
<b>15.</b> $-4x = 36$ Check:	<b>16.</b> $-2x = 52$ Check:
<b>17.</b> $\frac{x}{4} = 2.9$ Check:	<b>18.</b> $\frac{x}{5} = -1.4$ Check:
<b>19.</b> $\frac{1}{4}x = \frac{3}{8}$ Check:	<b>20.</b> $-\frac{3}{5}y = \frac{2}{3}$ Check:
<b>21.</b> $-7.1 = \frac{x}{3}$ Check:	<b>22.</b> $14 = \frac{y}{-2}$ Check:
<b>23.</b> $-x = 5$ Check:	<b>24.</b> $4.3 = -y$ Check:
<b>25.</b> $3x = -\frac{2}{3}$ Check:	<b>26.</b> $5x = \frac{1}{2}$ Check:
Answers: <b>15.</b> $-9$ ; <b>17.</b> $11.6$ ; <b>19.</b> $\frac{3}{2}$ ; <b>21.</b> $-21.3$ ; <b>23.</b> $-5$ ; <b>25.</b> $-\frac{2}{9}$	

Translate each mathematical sentence into an equation and solve. Check your solution.

**27.** The product of  $-5$  and a number is  $27$

**28.** The product of  $12$  and a number is  $48$ .

**29.** The sum of  $10$  and a number is  $-45$ .

**30.** The sum of  $1.5$  and a number is  $5$ .

**31.** Ten less than a number is  $38$ .

**32.** Twelve less than a number is  $3$ .

Answers: **27.**  $-5x = 27$ ,  $x = -\frac{27}{5}$ ; **29.**  $10 + x = -45$ ,  $x = -55$ ; **31.**  $x - 10 = 38$ ,  $x = 48$