Name:_____



Solving Quadratic Equations

Solve each equation by factoring.

$$1 \quad 6x^2 - 18x - 18 = 6$$

$$2(3x-2)(4x+1)=0$$

$$3p^2 = -16p - 21$$

$$4 7q^2 - 38q - 24 = 0$$

$$5 3v^2 + 72 = 33v$$

$$6 \quad 28w^2 = -96 - 184w$$

$$7 z^2 + 3z - 12 = 6$$

$$8 (4b + 5)(b + 1)$$

$$9 8r^2 + 3r = 7r^2 - 2$$

$$3x^2 - 16 = 8x$$

Solving Quadratic Equations

Answers

 $1 \quad 6x^2 - 18x - 18 = 6$

2 (3x - 2)(4x + 1) = 0

(4, -1)

 $\left(\frac{2}{3}, -\frac{1}{4}\right)$

 $3p^2 = -16p - 21$

 $4 7q^2 - 38q - 24 = 0$

 $\left(-\frac{7}{3}, -3\right)$

 $\left(-\frac{4}{7}, 6\right)$

 $5 3v^2 + 72 = 33v$

 $6 28w^2 = -96 - 184w$

(3, 8)

 $\left(-\frac{4}{7}, -6\right)$

 $7 z^2 + 3z - 12 = 6$

8 (4b + 5)(b + 1)

(3, -6)

 $\left(-\frac{5}{4}, -1\right)$

 $9 8r^2 + 3r = 7r^2 - 2$

 $10 \quad 3x^2 - 16 = 8x$

(-2, -1)

 $\left(-\frac{4}{3}, 4\right)$