Name : _____

Completing the Square

DS1

Solve each quadratic equation by completing the square.

1) $(k + 3)^2 + 8(k + 3) = -12$

2) $12\left(\frac{5}{6}n - 1\right) + \left(\frac{5}{6}n - 1\right)^2 - 13 = 0$

3) $-8\left(\frac{q + 2}{2}\right) + 2$

$)^2 + 8(0.5x) = 5.6$

5) $(4r - 2)^2 + 1 =$

$\Big) - 3 = 0$

Name : _____

Answer key

Completing the Square

DS1

Solve each quadratic equation by completing the square.

1) $(k + 3)^2 + 8(k + 3) = -12$

k = –9 ; k = –

2) $12\left(\frac{5}{6}n - 1\right) + \left(\frac{5}{6}n - 1\right)^2 - 13 = 0$

n = $\frac{12}{5}$

3) $-8\left(\frac{q + 2}{2}\right) +$ [illegible]

q = 2 ± 2i

$)^2 + 8(0.5x) = 5.6$

= 2

5) $(4r - 2)^2 + 1 =$ [illegible]

$\Big) - 3 = 0$

r = $\frac{5 \pm \sqrt{3}i}{8}$

v = $-\frac{4}{3}$; v = 1