Evaluating Algebraic Expressions

Evaluate each algebraic expression.

1) $6 + 7q$ when $q = \dfrac{2}{7}$

2) $\dfrac{16}{k}$ when $k = \dfrac{4}{5}$

3) $\dfrac{2}{5} p^2$ when $p = \dfrac{5}{6}$

4) $6z - 11$ when $z = \dfrac{4}{3}$

5) $(3 - m)(m + 4)$ when $m = -\dfrac{1}{2}$

6) $a - a^2 + 1$ when $a = -\dfrac{3}{8}$

7) $10 - 9d$ when $d = \dfrac{7}{9}$

8) $x(4 - x)$ when $x = -\dfrac{1}{4}$

Evaluating Algebraic Expressions

Answer key

Evaluate each algebraic expression.

1) $6 + 7q$ when $q = \dfrac{2}{7}$

8

2) $\dfrac{16}{k}$ when $k = \dfrac{4}{5}$

20

3) $\dfrac{2}{5}p^2$ when $p = \dfrac{5}{6}$

$\dfrac{5}{18}$

4) $6z - 11$ when $z = \dfrac{4}{3}$

−3

5) $(3 - m)(m + 4)$ when $m = -\dfrac{1}{2}$

$12\dfrac{1}{4}$

6) $a - a^2 + 1$ when $a = -\dfrac{3}{8}$

$\dfrac{31}{64}$

7) $10 - 9d$ when $d = \dfrac{7}{9}$

3

8) $x(4 - x)$ when $x = -\dfrac{1}{4}$

$-1\dfrac{1}{16}$