

Algebra and the Number Plane (1e) name

1) If $a = 4$, $b = 2$ and $c = 7$ find

a) $a + b + c$
=
=

b) $a^2 + 3$
=
=

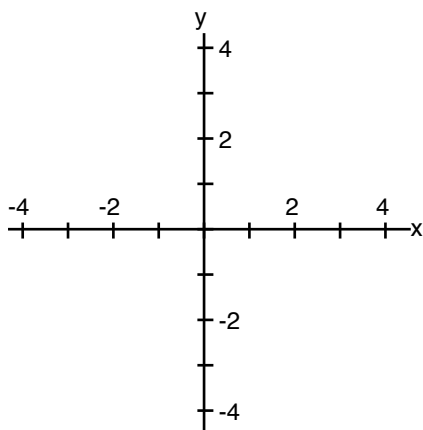
c) $ab + c$
=
=

d) $3c - b$
=
=

e) ab^2
=
=

f) $a^2 b$
=
=

2) Plot the points A(3, 3)
B(-2, 0) and C(4, -2)



3) Simplify

a) $3a + 7a =$

b) $7y - y =$

c) $6a + 5b + 5a + 2b$
=

d) $3k + 8h + 6k$
=

e) $4f + f + 2f + 9g$
=

f) $6p + 11q + p + q$
=

g) $7m^2 + 3m + m^2 - m$
=

h) $5p + 4m - p + 2m$
=

i) $7xy + 3g + 5xy - g$
=

4) Simplify

a) $g \times g \times g \times g \times g =$

b) $9 \times k \times k \times k =$

c) $c \times c \times a \times a \times 8 =$

d) $y \times 3 \times y \times y \times 5 \times y =$

e) $h \times h \times h =$

f) $p \times p \times 9 \times k \times k \times p$
=

g) $5 \times t \times t \times 5 \times t \times 2 \times t$
=

5) Simplify

a) $y^6 \times y^3 =$

b) $a^2 \times a^6 =$

c) $p^5 \times p =$

d) $6y^3 \times 7y^7 =$

e) $2k^4 \times 3k =$

f) $3a^5 \times a^4 =$

6) Expand

a) $9(y - 4) =$

b) $6(8a + 1) =$

c) $5(y - 7) =$

d) $4(y + 7a) =$

e) $8(5 - 2g) =$

f) $7(h + 4) =$

7) Solve

a) $a + 8 = 19$
 $a =$

b) $b - 8 = 5$
 $b =$

c) $6c = 42$
 $c =$

d) $d \div 4 = 9$
 $d =$

e) $8e - 2 = 22$
 $e =$

f) $6f + 1 = 25$
 $f =$

g) $7g - 2 = 68$
 $g =$

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