Algebra and the Number Plane (1c) name .....

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

a) $a + b + c$
=
=

b) $c^2 + 2$
=
=

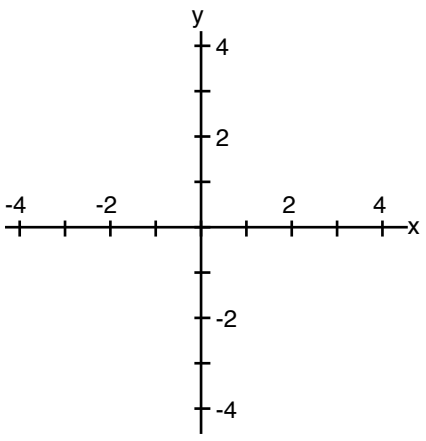
c) $bc + a$
=
=

d) $6c - b$
=
=

e) ab^2
=
=

f) $a^2 b$
=
=

2) Plot the points A(4 , 4) B(-1 , -2) and C(0 , -3)



3) Simplify

a) $3a + 4a =$

b) $8y - y =$

c) $4a + 2b + 5a + 7b$
=

d) $6k + 9h + 2k$
=

e) $5f + f + 3f + 9g$
=

f) $4p + 3q + p + q$
=

g) $7m^2 + 5m + m^2 - m$
=

h) $2p + 8m - p + 3m$
=

i) $9xy + 4g + 6xy - g$
=

4) Simplify

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

b) $5 \times k \times k \times k =$

c) $c \times c \times c \times a \times a \times 9 =$

d) $2 \times y \times y \times 4 \times y =$

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

f) $p \times p \times 5 \times k \times k \times p$
=

g) $4 \times t \times t \times 2 \times t \times 5 \times t$
=

Parent's signature and comment

5) Simplify

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

b) $a^3 \times a^7 =$

c) $p^6 \times p =$

d) $3y^2 \times 2y^7 =$

e) $5k^9 \times 3k =$

f) $6a^7 \times a^4 =$

6) Expand

a) $6(y - 3) =$

b) $7(2a + 3) =$

c) $5(y - 7) =$

d) $3(y + 7a) =$

e) $4(2 - 3g) =$

f) $5(h + 11) =$

7) Solve

a) $a + 12 = 20$
$a =$

b) $b - 4 = 12$
$b =$

c) $7c = 21$
$c =$

d) $d \div 5 = 6$
$d =$

e) $3e - 5 = 10$
$e =$

f) $4f + 1 = 25$
$f =$

g) $5g - 7 = 48$
$g =$