

Multiplication

- (positive) $\times$ (positive) = (positive)
- (positive) $\times$ (negative) = (negative)
- (negative) $\times$ (positive) = (negative)
- (negative) $\times$ (negative) = (positive)

Division

- (positive) $\div$ (positive) = (positive)
- (positive) $\div$ (negative) = (negative)
- (negative) $\div$ (positive) = (negative)
- (negative) $\div$ (negative) = (positive)

Example

Find:

a 3×7

b 3×-7

c -3×7

d -3×-7

a 3×7
 $= 21$

b 3×-7
 $= -21$

c -3×7
 $= -21$

d -3×-7
 $= 21$

Example

Find:

a $12 \div -3$

b $-12 \div -4$

c $18 \div -3$

d $-24 \div 8$

a $12 \div -3$
 $= -4$

b $-12 \div -4$
 $= 3$

c $18 \div -3$
 $= -6$

d $-24 \div 8$
 $= -3$

1 Find:

a 3×4

b -3×4

c 3×-4

d -3×-4

e 5×11

f 5×-11

g -5×-11

h -5×11

i 6×9

j 6×-9

k -6×9

l -6×-9

m $(-3)^2$

n -3^2

o $-(-3^2)$

p $-(-3)^2$

q $(-1)^4$

r $(-1)^5$

s $-(-1)^6$

t $-2 \times (-3)^2$

2 Find:

a $5 \times -2 \times 4$

b $-3 \times 2 \times -1$

c $(-4)^2 \times -3$

d $-3^2 \times -5$

e $8 \times (-2)^3$

f $-5 \times (-2)^4$

g $(-1)^5 \times (-3)^3$

h $-5 \times -2 \times -5$

3 Find:

a $15 \div 3$

b $-15 \div 3$

c $15 \div -3$

d $-15 \div -3$

e $24 \div 6$

f $24 \div -6$

g $-24 \div -6$

h $-24 \div 6$

i $7 \div 7$

j $-7 \div -7$

k $7 \div -7$

l $-7 \div 7$

Example

Find: a $3 - -6 \times 2$ b $13 + 25 \div -5$

a $3 - -6 \times 2$
 $= 3 - -12$ {multiplication first}
 $= 3 + 12$ {simplify}
 $= 15$

b $13 + 25 \div -5$
 $= 13 + -5$ {division first}
 $= 13 - 5$ {simplify}
 $= 8$

1 Find:

a $8 - 2 \times (-1)^3$

d $5 - 14 \div -2 + 1$

g $-5 - 15 \div -3$

j $(-2)^3 - (-2)^2$

b $15 - 6 \times -3$

e $6 - 7 - (-2)^2$

h $-12 + 3 \times -2$

k $15 - (-4)^2 \times -1$

c $-2 \times (3 - 5)^2$

f $(-2)^2 - -2^2$

i $3 \times -2 - -1 \times 5$

l $-16 \div (23 - -9)$

