



Decimal Disco

To multiply and divide whole numbers and decimals by 10, 100 and 1000.



Use your **Place Value Grid** to help you to work out the answers to these calculations:

1) Multiplying and Dividing by 10.

a) $65.6 \times 10 =$ _____

d) $5342 \div 10 =$ _____

b) $72.40 \div 10 =$ _____

e) $12\,547 \div 10 =$ _____

c) $639.67 \times 10 =$ _____

2) Multiplying and Dividing by 100.

a) $65.67 \times 100 =$ _____

d) $118 \div 100 =$ _____

b) $46 \div 100 =$ _____

e) $14\,523 \div 100 =$ _____

c) $209.46 \times 100 =$ _____

3) Multiplying and Dividing by 1000.

a) $4.1 \times 1000 =$ _____

d) $10\,000 \div 1000 =$ _____

b) $230 \div 1000 =$ _____

e) $14\,000 \div 1000 =$ _____

c) $199.02 \times 1000 =$ _____

4) 'Rock and roll' three dice to make a three-digit number. Multiply and divide your number by 10, 100 and 1000. Repeat this five times.

Number	$\times 10$	$\div 10$	$\times 100$	$\div 100$	$\times 1000$	$\div 1000$



Decimal Disco

To multiply and divide whole numbers and decimals by 10, 100 and 1000.



Work out the answers to these calculations:

1) Multiplying and Dividing by 10.

a) $65.9 \times 10 =$ _____

d) $180\,342 \div 10 =$ _____

b) $1232.9 \div 10 =$ _____

e) $132\,507 \div 10 =$ _____

c) $6399.67 \times 10 =$ _____

2) Multiplying and Dividing by 100.

a) $6738 \times 100 =$ _____

d) $9534 \div 100 =$ _____

b) $461.1 \div 100 =$ _____

e) $623\,400 \div 100 =$ _____

c) $2249.46 \times 100 =$ _____

3) Multiplying and Dividing by 1000.

a) $4.13 \times 1000 =$ _____

d) $100\,000 \div 1000 =$ _____

b) $3480 \div 1000 =$ _____

e) $2\,345\,000 \div 1000 =$ _____

c) $2199.52 \times 1000 =$ _____

4) 'Rock and roll' four dice to make a four-digit number. Multiply and divide this by 10, 100 and 1000. Repeat this five times.

Number	$\times 10$	$\div 10$	$\times 100$	$\div 100$	$\times 1000$	$\div 1000$



Decimal Disco

To multiply and divide whole numbers and decimals by 10, 100 and 1000.



1) Work out the answers to these calculations:

a) $25.8 \times 100 =$ _____

i) $2544 \div 100 =$ _____

b) $9832.9 \div 10 =$ _____

j) $927\,400 \div 1000 =$ _____

c) $5309.07 \times 1000 =$ _____

k) $46.3 \times$ _____ $= 46\,300$

d) $190\,412 \div 100 =$ _____

l) _____ $\div 1000 = 92.89$

e) $22\,547 \div 1000 =$ _____

m) $63.12 \times$ _____ $= 63\,120$

f) $1008 \times 100 =$ _____

n) _____ $\div 1000 = 1000$

g) $321.2 \div 10 =$ _____

o) _____ $\div 100 = 8745$

h) $2940.4 \times 1000 =$ _____

2) 'Rock and roll' five dice to make a five-digit number. Multiply and divide this by 10, 100 and 1000. Repeat this five times.

Number	$\times 10$	$\div 10$	$\times 100$	$\div 100$	$\times 1000$	$\div 1000$

Decimal Disco Answers

1.	Multiplying and Dividing by 10.		
a	$65.6 \times 10 = \mathbf{656}$	d	$5342 \div 10 = \mathbf{534.2}$
b	$72.40 \div 10 = \mathbf{7.24}$	e	$12\,547 \div 10 = \mathbf{1254.7}$
c	$639.67 \times 10 = \mathbf{6396.7}$		
2.	Multiplying and Dividing by 100.		
a	$65.67 \times 100 = \mathbf{6567}$	d	$118 \div 100 = \mathbf{1.18}$
b	$46 \div 100 = \mathbf{0.46}$	e	$14\,523 \div 100 = \mathbf{145.23}$
c	$209.46 \times 100 = \mathbf{20\,946}$		
3.	Multiplying and Dividing by 1000.		
a	$4.1 \times 1000 = \mathbf{4100}$	d	$10\,000 \div 1000 = \mathbf{10}$
b	$230 \div 1000 = \mathbf{0.23}$	e	$14\,000 \div 1000 = \mathbf{14}$
c	$199.02 \times 1000 = \mathbf{199\,020}$		
4.	'Rock and roll' three dice to make a three-digit number. Multiply and divide your number by 10, 100 and 1000. Repeat this five times.		
	Multiple answers possible.		



Decimal Disco Answers

1.	Multiplying and Dividing by 10.		
a	$65.9 \times 10 = 659$	d	$180\,342 \div 10 = 18\,034.2$
b	$1232.9 \div 10 = 123.29$	e	$132\,507 \div 10 = 13\,250.7$
c	$6399.67 \times 10 = 63\,996.7$		
2.	Multiplying and Dividing by 100.		
a	$6738 \times 100 = 673\,800$	d	$9534 \div 100 = 95.34$
b	$461.1 \div 100 = 4.611$	e	$623\,400 \div 100 = 6234$
c	$2249.46 \times 100 = 224\,946$		
3.	Multiplying and Dividing by 1000.		
a	$4.13 \times 1000 = 4130$	d	$100\,000 \div 1000 = 100$
b	$3480 \div 1000 = 3.48$	e	$2\,345\,000 \div 1000 = 2345$
c	$2199.52 \times 1000 = 2\,199\,520$		
4.	'Rock and roll' four dice to make a four-digit number. Multiply and divide this by 10, 100 and 1000. Repeat this five times.		
	Multiple answers possible.		



Decimal Disco Answers

1.	Work out the answers to these calculations:		
a	$25.8 \times 100 = \mathbf{2580}$	i	$2544 \div 100 = \mathbf{25.44}$
b	$9832.9 \div 10 = \mathbf{983.29}$	j	$927\,400 \div 1000 = \mathbf{927.4}$
c	$5309.07 \times 1000 = \mathbf{5\,309\,070}$	k	$46.3 \times \mathbf{1000} = 46\,300$
d	$190\,412 \div 100 = \mathbf{1904.12}$	l	$\mathbf{92\,890} \div 1000 = 92.89$
e	$22\,547 \div 1000 = \mathbf{22.547}$	m	$63.12 \times \mathbf{1000} = 63\,120$
f	$1008 \times 100 = \mathbf{100\,800}$	n	$\mathbf{1\,000\,000} \div 1000 = 1000$
g	$321.2 \div 10 = \mathbf{32.12}$	o	$\mathbf{8\,74\,500} \div 100 = 8745$
h	$2940.4 \times 1000 = \mathbf{2\,940\,400}$		
2.	'Rock and roll' five dice to make a five-digit number. Multiply and divide this by 10, 100 and 1000. Repeat this five times.		
	Multiple answers possible.		