Multiplying Decimals Worksheet

Example Calculate 4.7 x 3

Approximate: 5 x 3 = 15

Calculate: 47 x 3

X	40	7
3	120	21

120 + 21 = 141

So 4.7 x 3 = 14.1

Approximate your answer first, by making the calculation easier.

Remove the decimal point and use grid multiplication.

Add the decimal point back in so that it is as close to your approximation as possible.

1 Calculate each of following.
Approximate your answer first and use the grid method each time.

a) 5.2 x 3

Approximate: 5 x 3 =

Calculate: 52 x 3 =

X	50	2
3		

So 5.2 x 3 =

b) 5.2 x 4

Approximate: 5 x 4 =

Calculate: 52 x 3 =

X	50	2
4		

So 5.2 x 4 =

c) 5.2 x 8

Approximate: 5 x 8 =

Calculate: 52 x 8 =

X	50	2
8		

So 5.2 x 8 =

d) 5.3 x 8

Approximate: 5 x 8 =

Calculate: 53 x 8 =

X	50	3
8		

So 5.3 x 8 =

e) 5.4 x 8

Approximate: 5 x 8 =

Calculate: 54 x 8 =

X	50	
8		

So 5.4 x 8 =

f) 5.6 x 8

Approximate: 6 x 8 =

Calculate: 56 x 8 =

X	50	
8		

So 5.6 x 8 =

g) 6.6 x 8

Approximate: 6 x 8 =

Calculate: 66 x 3 =

X		6
8		

So 6.6 x 8 =

h) 6.8 x 6

Approximate:

Calculate: 68 x 6 =

X		
6		

i) So 6.8 x 6 =

j) 6.8 x 7

Approximate:

Calculate: 68 x 7 =

X		
7		

k) So 6.8 x 7 =

l) 16.8 x 7
Approximate:

Calculate: 168 x 7 =

X	100	60	8
7			

So 16.8 x 7 =

m) 1.68 x 7
Approximate:

Calculate: 168 x 7 =

X			
7			

So 1.68 x 7 =

n) 2.68 x 7
Approximate:

Calculate: 268 x 7 =

X			
7			

So 2.68 x 7 =

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o) 2.67 x 7
Approximate:

Calculate: 267 x 7 =

X			

So 2.67 x 7 =

p) 2.67 x 8
Approximate:

Calculate:

X			

So

q) 2.67 x 9
Approximate:

Calculate:

X			

So

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r) 2.69 x 8
Approximate:

Calculate:

X			

So

s) 5.38 x 4
Approximate:

Calculate:

X			

So

t) 5.38 x 3
Approximate:

Calculate:

X			

So

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u) 5.38 x 6
Approximate:

Calculate:

v) 5.38 x 9
Approximate:

Calculate:

w) 15.38 x 6
Approximate:

Calculate:

Challenge Questions

a) Using the digits from 1-9, and without repeating a digit, put them in the boxes below to get an answer **as close to 10** as possible.

□ . □ □ × □

b) Using the digits from 1-9, and without repeating a digit, put them in the boxes below to get an answer **as close to 100** as possible.

□ □ . □ □ × □

Example Calculate 4.7 x 1.2

Approximate: $5 \times 1 = 5$

Calculate: 47×12

X	40	7
10	400	70
2	80	14

$400 + 70 + 80 + 14 = 564$

So $4.7 \times 1.2 = 5.64$

Approximate your answer first, by making the calculation easier.

Remove the decimal point and use grid multiplication.

Add the decimal point back in so that it is as close to your approximation as possible.

2 Calculate each of following.

Approximate your answer first and use the grid method each time.

a) 2.4 x 1.3

Approximate: $2 \times 1 =$

Calculate: $24 \times 13 =$

X	20	4
10		
3		

So $2.4 \times 1.3 =$

b) 3.4 x 1.3

Approximate: $3 \times 1 =$

Calculate: $34 \times 13 =$

X	30	4
10		
3		

So $3.4 \times 1.3 =$

c) 3.4 x 2.6

Approximate: $3 \times 3 =$

Calculate: $34 \times 26 =$

X	30	4
20		
6		

So

d) 3.4 x 2.7

Approximate: $3 \times 3 =$

Calculate: $34 \times 27 =$

X	30	4
20		

So

e) 3.4 x 5.4

Approximate: $3 \times 5 =$

Calculate:

X		
50		
4		

So

f) 6.8 x 5.4

Approximate: $7 \times 5 =$

Calculate:

X		

So

g) 13.6 x 5.4

Approximate: $10 \times 5 =$

Calculate: $136 \times 54 =$

X	100	30	6
50			
4			

So

h) 14.6 x 5.4

Approximate:

Calculate: $146 \times 54 =$

X	100	40	6
50			
4			

So

i) 15.6 x 5.4

Approximate:

Calculate: $156 \times 54 =$

X			

So

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j) 15.7 x 2.7

Approximate:

Calculate:

X			

So

k) 15.7 x 3.7

Approximate:

Calculate:

X			

So

l) 16.7 x 3.7

Approximate:

Calculate:

X			

So

---

m) 1.67 x 3.7

Approximate:

Calculate:

n) 2.67 x 3.7

o) 1.67 x 3.79

Challenge Question

Using the digits from 1-9, and without repeating a digit, put them in the boxes below to get an answer **as close to 100** as possible.