

Use factors to help you solve these calculations. The first one has been done for you.

$$6 \times 40 = 6 \times 4 \times 10 = 24 \times 10 = 240$$

$$5 \times 24 = 5 \times \quad \times \quad = \quad \times \quad =$$

$$7 \times 14 = 7 \times \quad \times \quad = \quad \times \quad =$$

$$12 \times 15 =$$

Harrison's age is three more than a cube number and a multiple of ten. How old is Harrison?

Jason's age is above 40, and a multiple of six and five but not a multiple of nine. How old is Jason?

Tracey's age is one less than a square number and is a cube number. How old is Tracey?

Stacey's age is a square number and a cube number. She is older than 10. How old is Stacey?

Complete these tables by multiplying and dividing each number by 10, 100 and 1000.

x1000	x100	x10		÷10	÷100	÷1000
			40			

x1000	x100	x10		÷10	÷100	÷1000
			100			

x1000	x100	x10		÷10	÷100	÷1000
			56			

x1000	x100	x10		÷10	÷100	÷1000
			847			

Solve these multiplication and division problems mentally.

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|--|--|---|---|
| 1) $120 \times 3 = \underline{\quad}$ | 2) $4800 \div 12 = \underline{\quad}$ | 3) $3 \times 4 \times 8 = \underline{\quad}$ | 4) $90 \div 3 = \underline{\quad}$ |
| 5) $420 \div 6 = \underline{\quad}$ | 6) $2 \times 4 \times 9 = \underline{\quad}$ | 7) $100 \div 2 \div 5 = \underline{\quad}$ | 8) $50 \times 50 = \underline{\quad}$ |
| 9) $990 \div 11 = \underline{\quad}$ | 10) $280 \div 7 = \underline{\quad}$ | 11) $900 \times 5 = \underline{\quad}$ | 12) $300 \times 6 = \underline{\quad}$ |
| 13) $64 \div 8 \div 2 = \underline{\quad}$ | 14) $3600 \div 4 = \underline{\quad}$ | 15) $7 \times 3 \times 4 = \underline{\quad}$ | 16) $72,000 \div 8 = \underline{\quad}$ |

Complete this multiplication grid. Only fill in the squares you can solve mentally.

x	5			6		4		20
						800		4000
40		360	440					
				18,000				60,000
	1500						2400	
50							400	1000
		720						1600
600	3000			3600				

Each box of chocolates has two layers with eight chocolates in each layer. How many chocolates are there in 20 boxes?

A chicken farm produces 2400 eggs each day which go into boxes of six. How many boxes of eggs does it produce in a day?

There are 50 horses and 10 cats on a ranch. How many legs do the animals have between them?