



Factoring numbers into primes factors (1–400)

Grade 6 Factoring Worksheet

Factor the following numbers into prime factors.

Is the number prime?

1) $71 =$ _____ 2) $38 =$ _____

3) $36 =$ _____ 4) $93 =$ _____

5) $20 =$ _____ 6) $166 =$ _____

7) $316 =$ _____ 8) $193 =$ _____

9) $344 =$ _____ 10) $54 =$ _____

11) $223 =$ _____ 12) $373 =$ _____

13) $140 =$ _____ 14) $73 =$ _____

15) $56 =$ _____ 16) $24 =$ _____

17) $270 =$ _____ 18) $33 =$ _____

19) $83 =$ _____ 20) $72 =$ _____



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Factor the following numbers into prime factors.

Is the number prime?

1) $71 = \underline{71 \text{ (Yes)}}$ 2) $38 = \underline{2 \times 19 \text{ (No)}}$

3) $36 = \underline{2 \times 2 \times 3 \times 3 \text{ (No)}}$ 4) $93 = \underline{3 \times 31 \text{ (No)}}$

5) $20 = \underline{2 \times 2 \times 5 \text{ (No)}}$ 6) $166 = \underline{2 \times 83 \text{ (No)}}$

7) $316 = \underline{2 \times 2 \times 79 \text{ (No)}}$ 8) $193 = \underline{193 \text{ (Yes)}}$

9) $344 = \underline{2 \times 2 \times 2 \times 43 \text{ (No)}}$ 10) $54 = \underline{2 \times 3 \times 3 \times 3 \text{ (No)}}$

11) $223 = \underline{223 \text{ (Yes)}}$ 12) $373 = \underline{373 \text{ (Yes)}}$

13) $140 = \underline{2 \times 2 \times 5 \times 7 \text{ (No)}}$ 14) $73 = \underline{73 \text{ (Yes)}}$

15) $56 = \underline{2 \times 2 \times 2 \times 7 \text{ (No)}}$ 16) $24 = \underline{2 \times 2 \times 2 \times 3 \text{ (No)}}$

17) $270 = \underline{2 \times 3 \times 3 \times 3 \times 5 \text{ (No)}}$ 18) $33 = \underline{3 \times 11 \text{ (No)}}$

19) $83 = \underline{83 \text{ (Yes)}}$ 20) $72 = \underline{2 \times 2 \times 2 \times 3 \times 3 \text{ (No)}}$