

Worksheet

04/19/2019

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Problem quickname: 5356

1)

Find the prime factorization of the number indicated.

Quick:
5356

- a) $105 = 3 \cdot 5 \cdot 7$ b) $135 = 3 \cdot 3 \cdot 3 \cdot 5 = 3^3 \cdot 5$
 c) $150 = 2 \cdot 3 \cdot 5 \cdot 5 = 2 \cdot 3 \cdot 5^2$ d) $108 = 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 = 2^2 \cdot 3^3$
 e) $180 = 2 \cdot 2 \cdot 3 \cdot 3 \cdot 5 = 2^2 \cdot 3^2 \cdot 5$ f) $189 = 3 \cdot 3 \cdot 3 \cdot 7 = 3^3 \cdot 7$
 g) $63 = 3 \cdot 3 \cdot 7 = 3^2 \cdot 7$ h) $45 = 3 \cdot 3 \cdot 5 = 3^2 \cdot 5$ i) $75 = 3 \cdot 5 \cdot 5 = 3 \cdot 5^2$
 j) $126 = 2 \cdot 3 \cdot 3 \cdot 7 = 2 \cdot 3^2 \cdot 7$

2)

Find the prime factorization of the number indicated.

Quick:
5356

- a) $182 = 2 \cdot 7 \cdot 13$ b) $153 = 3 \cdot 3 \cdot 17 = 3^2 \cdot 17$ c) $91 = 7 \cdot 13$
 d) $130 = 2 \cdot 5 \cdot 13$ e) $195 = 3 \cdot 5 \cdot 13$ f) $143 = 11 \cdot 13$
 g) $170 = 2 \cdot 5 \cdot 17$ h) $119 = 7 \cdot 17$ i) $85 = 5 \cdot 17$
 j) $140 = 2 \cdot 2 \cdot 5 \cdot 7 = 2^2 \cdot 5 \cdot 7$

3)

Find the prime factorization of the number indicated.

Quick:
5356

- a) $78 = 2 \cdot 3 \cdot 13$ b) $82 = 2 \cdot 41$ c) $92 = 2 \cdot 2 \cdot 23 = 2^2 \cdot 23$
 d) $77 = 7 \cdot 11$ e) $46 = 2 \cdot 23$ f) $87 = 3 \cdot 29$ g) $51 = 3 \cdot 17$
 h) $62 = 2 \cdot 31$ i) $74 = 2 \cdot 37$ j) $94 = 2 \cdot 47$

4)

Find the prime factorization of the number indicated.

Quick:
5356

- a) $180 = 2 \cdot 2 \cdot 3 \cdot 3 \cdot 5 = 2^2 \cdot 3^2 \cdot 5$ b) $140 = 2 \cdot 2 \cdot 5 \cdot 7 = 2^2 \cdot 5 \cdot 7$
 c) $196 = 2 \cdot 2 \cdot 7 \cdot 7 = 2^2 \cdot 7^2$ d) $144 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 \cdot 3 = 2^4 \cdot 3^2$
 e) $90 = 2 \cdot 3 \cdot 3 \cdot 5 = 2 \cdot 3^2 \cdot 5$ f) $42 = 2 \cdot 3 \cdot 7$
 g) $120 = 2 \cdot 2 \cdot 2 \cdot 3 \cdot 5 = 2^3 \cdot 3 \cdot 5$ h) $150 = 2 \cdot 3 \cdot 5 \cdot 5 = 2 \cdot 3 \cdot 5^2$
 i) $135 = 3 \cdot 3 \cdot 3 \cdot 5 = 3^3 \cdot 5$ j) $126 = 2 \cdot 3 \cdot 3 \cdot 7 = 2 \cdot 3^2 \cdot 7$

Good Luck!