

Reviewing number concepts

Instructions: Study on the concept of number from the book and online resources then answer the worksheets.

1. Look at this set of numbers.

3, -2, 0, 1, 9, 15, 4, 5, -7, 10, 32, -32, 21, 23, 25, 27, 29, $\frac{1}{2}$

- a) Which of these numbers are NOT natural numbers?

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- b) Which of these numbers are NOT integers?

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- c) Which of these numbers are prime numbers?

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- d) Which of these numbers are square numbers?

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2. Express the following numbers as a product of their prime factors.

- a) 36

- b) 65

- c) 64

- d) 84

- e) 80

- f) 1,000

- g) 1,270

- h) 1,963

3. Find the LCM and the HCF of the following numbers by means of prime factors.

a) 27 and 14

b) 85 and 15

c) 96 and 27

d) 53 and 16

e) 674 and 72

f) 234 and 66

g) 550 and 128

h) 315 and 275

4. Calculate

a) 3^2

b) 18^2

c) 15^3

d) 35^3

5. Find the roots.

a) $\sqrt{121}$

b) $\sqrt[3]{512}$

c) $\sqrt[3]{46656}$

d) $\sqrt{3136}$

6. Simplify.

a) $\sqrt{9} + \sqrt{16}$

b) $\sqrt{64} + \sqrt{36}$

c) $(\sqrt{25})^2$

d) $\sqrt{169 - 144}$

e) $\sqrt{1} + \sqrt{\frac{9}{16}}$

f) $\sqrt{16}x\sqrt[3]{27}$

7. Calculate and give your answer correct to two decimal places.

a) $8 + 3 \times 6$

b) $8 \times 3 - 4 \div 5$

c) $12.64 + 2.32 \times 1.3$

d) $(6.7 \div 8) + 1.6$

e) $1.453 + \frac{7.6}{3.2}$

f) $\frac{0.23 \times 4.26}{1.32 + 3.43}$

g) $\frac{12.65}{2.04} + 1.7 \times 4.3$

h) $\frac{2.8 \times 4.2^2}{3.3^2 \times 6.2^2}$

i) $2.5 - \left(3.1 + \frac{0.5}{5}\right)^2 (3.3)^2$

8. List the first five multiples of 15.

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9. Find the lowest common multiple of 12 and 15.

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10. Find the HCF of 28 and 42.

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11. Round each number to three significant figures.

a) 1235.6

b) 0.76513

c) 0.0237548

d) 31.4596

