

Revision Homework 3

All of the questions below are to be completed without a calculator.

If you need to do any working, please do so on some paper.

1. By rounding the numbers, estimate the answer to the following:

a) 9.4×14.85

=

b) $501 \div 9.76$

=

2. A train left London at 0900 with 413 passengers on board. There is enough space on the train for 658 passengers. The return train left at 1815 with 120 empty seats. How many more passengers were on the return train.

3. Calculate the following:

a) $3 \times 3 \times 3 \times 3 =$

b) $2^8 =$

c) $\sqrt{36} =$

d) $\sqrt[3]{64} =$

4. Calculate the following:

a) 0.8×0.02

=

b) 120×0.07

=

5. Write the following in index (power form). **DO NOT EVALUATE:**

a) $6 \times 6 \times 6 \times 6 \times 6$

=

b) $2 \times 3 \times 3 \times 3 \times 2 \times 3$

=

6. Using the symbols $<$ or $>$, decide which would make the following statement true:

a. 23 -6

b. -20 -14

7. The temperature in Australia is 32°C . The temperature in Russia is 50°C colder than Australia. Canada is 15°C warmer than Russia. What is the temperature in Canada?

_____ $^{\circ}\text{C}$

8. A can of Fanta and 2 packets of crisps together costs £1.40.
3 cans of Fanta and 2 packets of crisps together costs £2.60.
How much would five cans of Fanta and 5 packets of crisps cost?

9. Calculate the following:

a) $9 + (-2)$

=

b) $(-6) - (-5)$

=

c) $(-12) \times 4$

=

d) $(-8) \div (-2)$

=

10. Calculate:

a) $3 + 4^2$

=

b) $8 - 8 \times 10$

=

c) $7 \times 4 + 9 \times 9$

=

d) $10 + 5(6 + 1)$

=

11. Here is a number machine:



a. Work out the output when the input is 8.

b. Work out the output when the input is 2.

c. Work out the input when the output is 26.

d. Work out the input when the output is -4.