

S1 Diagnostic Assessment

Revision Sheet

Department of Mathematics & Numeracy

Bellahouston Academy

**Whole Numbers**

1. Write forty seven thousand six hundred and five using digits.

2. Write the following numbers in words:

1. 765 b) 41202 c) 619,823.

3. Round these numbers to the nearest ten:

a) 738 b) 4198 c) 13784 d) 18.6

4. Put the following numbers in ascending order: (smallest to biggest).

27653, 27536, 27635, 26735, 25673

5. Calculate:

a) 42 x 100 b) 158 x 100 c) 153 x 1000

6. Calculate:

a) 189000 100 b) 54 100 c) 480 1000

7. Calculate:

a) 42 x 20 b) 15 x 300 c) 24 x 200

1. Do the following mentally :-
   1. A train carrying 84 passengers stops at a station and 27 get off the train. How many passengers are still on the train?
   2. One hundred and ninety two passengers disembark from an aeroplane. If there are two hundred and seventeen passengers still on board, how many passengers were originally on the plane?
2. Dave buys trainers £28, tracksuit £44 and an exercise mat £16. **Estimate** his total bill.
3. BODMAS
4. 7 + 5 X 8 b) 32 ÷ (10 – 2) c) 3 x (5 + 2) d)35 +50 ÷ 10

**Decimals**

1. What number is each arrow pointing to?

0.6

0.5

0.4

2. When each number is rounded to one decimal place, which of the two numbers is the correct answer:

a) 5.31 (**5.3** or **5.4**) ? b) 7.85 (**7.8** or **7.9**) ? c) 0.08 (**0.0** or **0**.**1**)?

3. Round 18045 to the nearest:

a) 10

b) 100

c) 1000

4. Round 18.045 to:

a) 1 decimal place

b) the nearest whole number

5. Complete the following:

a) 17.44 + 2.5 b) 9.34 + 3.9 c) 0.6– 0.03.

6. Look at the plan of the L-shaped living room.

a) Calculate the length of room (marked x metres).

y

8.7m

4.2m

7.54m

x

3.4m

b) Calculate the value of y.

7. Kelly weighs 65.38kg and Usman weighs 56.49kg.

a) What is their combined weight?

b) By how much is Kelly heavier than Usman?

8. Calculate:

a) 31.2 x 7 b) 0.34 x 4 c) 19.14 ÷ 2 d) 41.23 ÷ 7

**Sequences**

1. Write the next three numbers in each pattern:
2. 11, 14, 17, …
3. 64, 32, 16, ..
4. 5, 10, 15, 20,..
5. 1, 4, 9, 16, ..

**Time**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. | Change the following to 24 hour times :- | | | |  |  |  |  |
|  | (a) | 8·30 am | (b) | 1·50 pm | (c) | 4·20 pm | (d) | 9·01 pm |
|  | (e) | 6·10 am | (f) | 9·45 pm | (g) | 11·12 pm | (h) | 12·10 pm |
|  | (i) | 7·08 pm | (j) | 11·59 pm | (k) | 11·59 am | (l) | midnight |
|  | (m) Quarter past nine at night | | | | (n) Half past two in the afternoon | | | |
|  |
|  | 1. Change the following to 12 hour times:- | | | |  |  |  |  |
|  | (a) | 0440 | (b) | 1610 | (c) | 2205 | (d) | 1910 |
|  | (e) | 1130 | (f) | 0010 | (g) | 1255 | (h) | 1010 |
|  | (i) | 1706 | (j) | 0101 | (k) | 2010 | (l) | 0000 |

1. A train left the station at 1105 and arrived at its destination at 1750. How long was the journey?
2. A paper round started at 6·25 am and took 1 hour 50 mins. What time did the round finish?

**Fractions & Percentages**

1. Calculate:
2. of 66 b) of 48 c) of 63 d) of 616

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Write these as fractions in their simplest form :- | | | | |  |  |  |  |  |  |  |  |  |  |
| (a) 50% | (b) | 25% | | (c) | 64% | | | | (d) | 75% | | |  |  |
| (e) 20% | (f) | 66 | 2/3% | (g) | 33 1/3% | | | | (h) | 12·5% | | | | |

1. a) How many metres are there in 2km?
2. How many cm are there in 3m?
3. How many ml are there in 5litres?

**Money**

1. I bought seven computer chairs for £358·75. I sold them for £65 each.
   1. How much profit did I make ?
   2. If I had only sold 5 chairs would I still have made a profit? (Explain).
2. Five sandwiches and three cups of coffee cost £12·35.

If the sandwiches cost £1·75 each, how much was each cup of coffee?

1. I bought nine footballs and sold them for £166·50.

If I made a profit of £47·25, how much did each football originally cost?