



Goals

Revision!

Exam: Week 10, Wednesday 3rd April, at 11:15 am – 1:15 pm

Make sure of you have a calculator!

Theoretical Components

This Term:

Weeks 1 and 2:

- Why Maths?
- Order of operations (BODMAS)

Week 3:

- Estimate length, weight, time, and other metrics
- Estimate the value of maths sums
- Round numbers to 10's, 100's, 1000's etc

Week 4:

- Truncating and rounding
- Using multiples in measurement
- Using decimals in time.

Week 5/6:

- Percentages as decimals
- Percentages as fractions
- 50%, 25% and 10% as benchmarks
- Percentages **of** amounts
- Percentages **off** amounts
- What percentage?

Week 7/8:

- Common rates
- The rate at which we use energy - kilojoules
- Converting km/hr to mph and vice-versa
- Unit pricing

Practical Components

There are some revision questions for you to complete.

Go through your folders and complete any missing tasks and review any questions that are incorrect.

Make sure you have handed in any unsubmitted work before the end of Week 9. This is your last chance to submit Week 1 to 8 work.

Your classwork and portfolio tasks make up **25%** of your grade for this semester.

Organise your folders in preparation for your test.

Portfolio Task

Prepare for your exam. Organise your folders.

Other

There is a **25% test** during **Week 10**. It will be held in the Gym and it is "open book" so you may use your folders. Make sure to get your briefs up-to-date and bring a calculator and writing equipment to the test.

ESSENTIAL MATHEMATICS 1

REVISION

1. Which of these statements are true and which are false?

a. $8 + 2 \times 3 = 14$

b. $12 - 4 \times 3 = 16$

c. $5 \times 2^2 = 100$

d. $(42 - 36) \times 2 = 12$

e. $24 \div 6 \times 2 = 2$

f. $\frac{10+8}{7-5} = 9$

2. What is the value of the following expressions?

a. $3 \times (5 + 4)$

b. $8 \times 2 - 3 \times 5$

c. $(12 - 9) \times (7 - 2)$

d. $(18 + 3) \div 2 \times 3$

e. $\frac{16+9}{5}$

f. $\frac{5+3 \times 10}{5}$

3. Express 43% as a fraction in simplest form.

4. Express 90% as a fraction in simplest form.

5. Write the fraction $\frac{7}{10}$ as a percentage.

6. Express the fraction $\frac{15}{71}$ as a percentage, correct to two decimal places.

7. Consider the fraction $\frac{114}{400}$
 - a. First, convert to a fraction with a denominator of 100

 - b. Now, convert to a percentage

8. Express 4.5% as a fraction in simplest form.

9. David is paying for a meal with lots of friends. They received great service, so he is giving a 20% tip. The meal cost \$182.30, how much will David leave as a tip? Show working.

10. Aaron works at a restaurant that automatically charges 25% service to groups of 8 or more people. He has just served a group of 8 people. Before sales tax, their meal came to \$238.51. How much of a tip is Aaron going to get from this bill? Round your answer to the nearest cent.

11. 270 students at a school voted for a new uniform. If this is 45% of the school population, what is the school population?

12. The cost of a holiday is discounted by 20%. The holiday now costs \$7,200. What was the original cost of the holiday?

13. Round the following to the nearest **integer (units)**:

a. 12.56

b. 16.92

c. 48.21

d. 493.44

e. 1.45

f. 68.324

14. Round the following to one decimal place (tenths):

a. 68.194

b. 20.45

c. 34.6821

d. 13.01


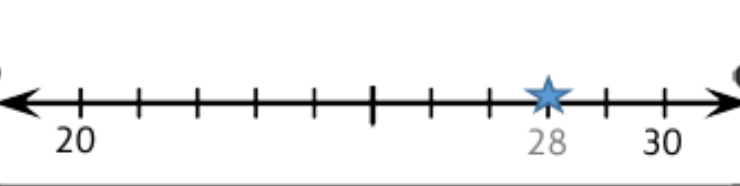


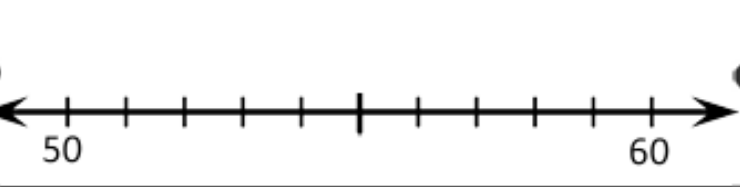


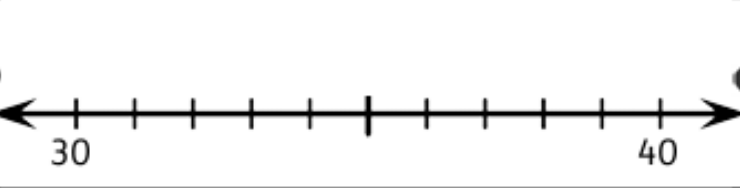


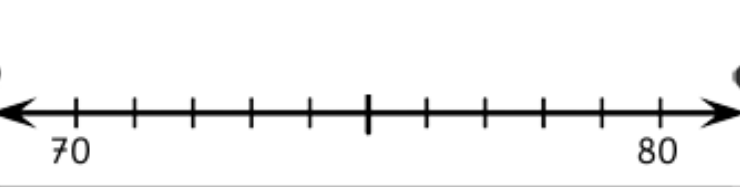





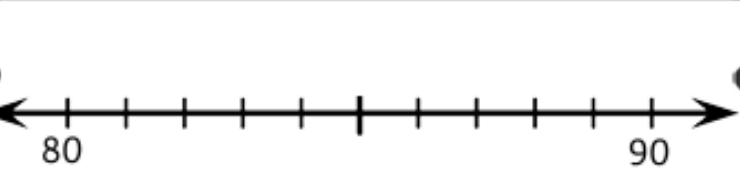


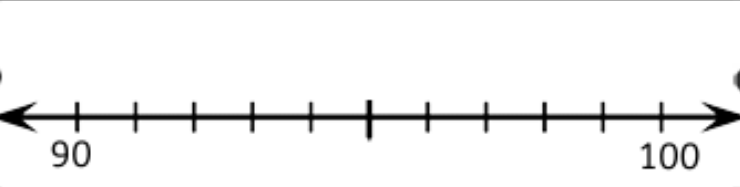

e. 672.1548

f. 964.214

15.

Round to the nearest 10

Directions: Round to the nearest 10 by using the number line.
The first one has been done for you.

16.

Rounding Numbers

Round off the given numbers as specified. Tick if it is rounded up or rounded down.

Round off to the whole number.

8.02	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>
62.783	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>
31.490	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>
96.567	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>

Round off to the nearest tenth.

613.03	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>
7.92	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>
18.462	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>
45.819	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>

Round off to the nearest hundredth.

0.999	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>
3.781	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>
51.243	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>
86.136	→	<input type="text"/>	Round Up	<input type="checkbox"/>	Round Down	<input type="checkbox"/>

17.

Equivalent Ratios

.....

Complete the equivalent ratios.

1) $\underline{\quad} : 8 = 5 : 2$

2) $3 : \underline{\quad} = 21 : 35$

3) $27 : 72 = 3 : \underline{\quad}$

4) $6 : 7 = 36 : \underline{\quad}$

5) $20 : 28 = 5 : \underline{\quad}$

6) $30 : 54 = 5 : \underline{\quad}$

7) $99 : \underline{\quad} = 11 : 7$

8) $27 : 72 = 3 : \underline{\quad}$

9) $7 : 12 = 28 : \underline{\quad}$

10) $7 : 8 = 49 : \underline{\quad}$

11) $9 : \underline{\quad} = 36 : 16$

12) $18 : \underline{\quad} = 6 : 7$

13) $9 : 10 = \underline{\quad} : 20$

14) $12 : 7 = \underline{\quad} : 63$

15) $72 : \underline{\quad} = 12 : 11$

16) $\underline{\quad} : 30 = 4 : 3$

17) $21 : 35 = 3 : \underline{\quad}$

18) $8 : 3 = \underline{\quad} : 12$

19) $3 : 7 = 18 : \underline{\quad}$

20) $16 : \underline{\quad} = 2 : 3$

18.

Measuring Units Worksheet

Convert.

1 a. 7 km = _____ m

1 b. 1 cm = _____ mm

2 a. 10 m = _____ cm

2 b. 200 cm = _____ m

3 a. 6,000 m = _____ km

3 b. 3,000 m = _____ km

4 a. 2,000 m = _____ km

4 b. 900 cm = _____ m

5 a. 60 mm = _____ cm

5 b. 700 cm = _____ m

6 a. 90 mm = _____ cm

6 b. 9,000 m = _____ km

7 a. 4,000 m = _____ km

7 b. 5,000 m = _____ km

8 a. 8,000 m = _____ km

8 b. 3 cm = _____ mm

9 a. 7 cm = _____ mm

9 b. 300 cm = _____ m

10 a. 20 mm = _____ cm

10 b. 100 mm = _____ cm

Checklist: Are you up to date with your briefs this semester?

Brief: topic/work covered	Rules and formulae; worked examples / Reminders
Week 1: Introduction Score: /20	
Week 2: Calculations Score: /20	
Week 3: Estimation Score: /20	
Week 4: Further Estimation Score: /20	
Week 5/6: Percentages Score: /20	
Week 7/8: Rates Score: /20	
TOTAL Score: /120	%