


YEAR 7 CORE: BOOK 1A

mathsquad




-practice-
homework








name: _____

form: _____

Welcome to the ‘Mathsquad Practice’ Homework Program. These sheets are designed to give you multiple opportunities to learn and revise key mathematical skills. Completing these sheets will help you become equipped with the skills you need to be a successful user of mathematics in school and every day life. The following points will help you get the most out of the program. Enjoy!

- The first page of each sheet is technology free and you are not allowed to use a calculator.
- The second page of each sheet is technology active and you are allowed to use a calculator.
- When you see the  symbol include some working to support your answer. This could involve a calculation, annotating a diagram or an explanation of your thought process.
- You may be able to complete very few questions or almost all of them, it doesn't matter. As long as you give your best effort and try to improve each time you are maximising your success!
- If you feel that some or all of these questions aren't suitable for you, have a chat with your teacher.
- All fractional answers must be given in simplified form.
- When solving equations algebraic line by line working must be shown.

Attempt these questions if your teacher has ticked this box. If not ticked, feel free to give them a go.

F4.  $1224 + 2037$	F6.  $784 - 295$	F8.  48×15	F10.  $9531 \div 9$
F14. a. What is the place value of the 8 in 7.418? b. Round 4.5619 to 2 decimal places (2 dp.)	F15. Write 36 as a product of prime numbers	F23. a.  Substitute $x = 9$ into $x + 5$ and evaluate. b.  Substitute $x = 40$ into $\frac{x}{8}$ and evaluate.	F24.  Solve the equations below and include working that shows your use of an opposite operation. a. $x - 8 = 7$ b. $\frac{x}{6} = 4$

1. a. $6 + -4 =$

b. $4 - 6 =$

2. Circle any words that describe the number 5.

odd square mult. of 2

3. Determine the highest common factor of 16 and 20.

4. Determine the lowest common multiple of 7 and 5.

5. Calculate

$(7 - 4)^2$

6. Insert $<$, $=$ or $>$ between the decimals and, if possible, circle the biggest decimal.

1.25 1.250

7. a. $4.48 \times 10 =$

b. $58.58 \div 10 =$

8. Complete the table below

P	F	D
	$\frac{23}{25}$	

9. Calculate $\frac{3}{4} + \frac{5}{16}$

10. Calculate $\frac{1}{3} \times \frac{4}{6}$

11. Calculate $\frac{4}{16} \div \frac{10}{8}$

12. Calculate $3\frac{3}{4} \div 2$

13. Evaluate $2.66 + 0.8$

14. Evaluate 4.68×3

15. Evaluate $0.555 \div 0.3$

16. Calculate 60% of 26

17. Substitute $x = 2$ into $3(x + 5)$ and evaluate.

18. Solve the following:

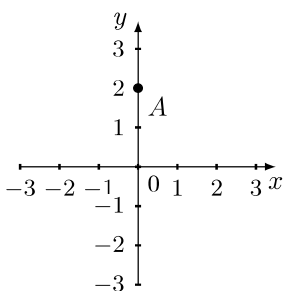
$49 = 7(x + 3)$

19. Solve the following:

a. $x + 5 = 4$

b. $9x = 32$

20. The point A is rotated 270° anti-clockwise around the origin. Plot A' , the image of A , and state its coordinates.



$A' =$ _____

21. Consider the linear relationship

$y = 7x - 2$

Complete the missing value in each coordinate so each satisfies the given relationship.

$(6, \quad)$

$(\quad, 5)$





22. The points below follow a rule of the form


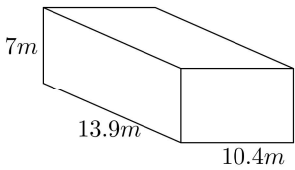
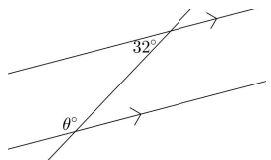

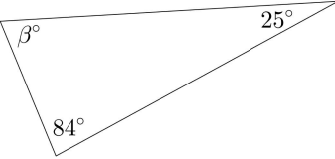





$y = \square x + \square$

x	-1	0	1	2	3	4
y		2			8	

Complete the rule and table above.

Attempt these **technology free** questions if your teacher has ticked this box. If not ticked, feel free to give them a go.

<p>C^{+1}. Evaluate $-12 - -31$</p>	<p>C^{+2}.  Substitute $x = \frac{2}{7}$ into $12x + 6$ and evaluate.</p>	<p>C^{+3}.  Solve $\frac{x+4}{3} = \frac{50}{33}$</p>
<p>C^{+4}.  The average weight of 6 boys is 72kg and the average weight of 4 girls is 52kg. What is the average weight of the ten children?</p>	<p>C^{+5}.  Write $\frac{1}{15}$ as a sum of two different unit fractions in as many different ways as possible</p>	<p>C^{+6}. ★ In the multiplication $PQR \times 3 = QQQ$ each of P, Q and R represents a different digit. What is the sum of P, Q and R?</p>

<p>23. a. Circle the units that complete the statement. Most long weekends last for 3__</p> <p>secs mins hrs days</p> <p>b. $180 \text{ min} =$ hr</p>	<p>24.  To the nearest whole number, what is the volume the shape below?</p>  <p>$V =$</p>	<p>25. a. A bag contains 13 balls numbered 1 to 13. A ball is randomly selected.</p> <p>a. What is the sample space?</p> <p>b. What is the probability of selecting a ball that is a multiple of 5?</p>
<p>26. a. Circle the word that classifies the relationship between the angles below.</p>  <p>co-interior corresponding alternating</p> <p>b. What is the value of θ?</p>	<p>27. a.  Calculate the size of angle β</p>  <p>b. Which word(s) classifies the triangle?</p> <p>scalene right isosceles equilateral</p>	<p>28.  Calculate the following statistics for the below data set</p> <p>9, 9, 7, 6, 3, 1, 0, 8</p> <p>a. median =</p> <p>b. mean to 1 dp. \approx</p>
<p>29. On Monday it was -7°C and on Tuesday it was -2°C. Which day was colder and by how much?</p>	<p>30.  7 apples cost \$2.45. How much would 5 apples cost?</p>	<p>31.  A ferris wheel turns at a constant speed. It takes 4 minutes to turn through a complete circle. What angle does the ferris wheel turn through in 150 seconds?</p>
<p>Review of Work</p> <p>Level of effort: <input type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> Low</p> <p>Working out shown? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Quote</p> <p>Stop being afraid of what you could get wrong and think of what you could get right.</p> <p> </p>	<p>Improvement</p> <p>What progress did you make in maths this week?</p>	<p>Optional Teacher Comment</p>