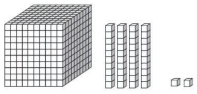
mathsquad	Pretest for Mathsquad Program	Name:

Step 1: ★ Start a timer ★ Complete the 90 times tables questions ★ Stop the timer ★ Record your time

1. $5 \times 6 =$	19. $10 \times 5 =$	37. $1 \times 10 =$	55. $9 \times 9 =$	73. $7 \times 3 =$
2. $4 \times 8 =$	20. $4 \times 11 =$	38. $10 \times 2 =$	56. $10 \times 7 =$	74. $9 \times 12 =$
3. $6 \times 3 =$	21. $10 \times 4 =$	39. $8 \times 9 =$	57. $4 \times 6 =$	75. $12 \times 2 =$
4. $5 \times 3 =$	22. $1 \times 6 =$	40. $7 \times 12 =$	58. $2 \times 7 =$	76. $10 \times 6 =$
5. $11 \times 5 =$	23. $4 \times 9 =$	41. $4 \times 2 =$	59. $6 \times 12 =$	77. $11 \times 6 =$
6. $8 \times 3 =$	24. $5 \times 9 =$	42. $0 \times 9 =$	60. $2 \times 0 =$	78. $8 \times 7 =$
7. $0 \times 4 =$	25. $2 \times 1 =$	43. $4 \times 3 =$	61. $0 \times 3 =$	79. $9 \times 3 =$
8. $9 \times 2 =$	26. $10 \times 10 =$	44. $12 \times 4 =$	62. $12 \times 10 =$	80. $11 \times 12 =$
9. $8 \times 2 =$	27. $0 \times 10 =$	45. $5 \times 1 =$	63. $6 \times 8 =$	81. $9 \times 6 =$
10. $1 \times 1 =$	28. $12 \times 8 =$	46. $6 \times 6 =$	64. $3 \times 1 =$	82. $11 \times 8 =$
11. $2 \times 2 =$	29. $6 \times 0 =$	47. $4 \times 5 =$	65. $1 \times 8 =$	83. $1 \times 11 =$
12. $0 \times 5 =$	30. $11 \times 10 =$	48. $2 \times 6 =$	66. $5 \times 12 =$	84. $5 \times 5 =$
13. $4 \times 1 =$	31. $10 \times 3 =$	49. $12 \times 12 =$	67. $7 \times 9 =$	85. $4 \times 4 =$
14. $0 \times 12 =$	32. $3 \times 3 =$	50. $12 \times 3 =$	68. $2 \times 11 =$	86. $0 \times 7 =$
15. $1 \times 0 =$	33. $1 \times 12 =$	51. $8 \times 8 =$	69. $9 \times 1 =$	87. $11 \times 0 =$
16. $6 \times 7 =$	34. $9 \times 10 =$	52. $11 \times 7 =$	70. $3 \times 11 =$	88. $7 \times 7 =$
17. $10 \times 8 =$	35. $2 \times 5 =$	53. $7 \times 5 =$	71. $1 \times 7 =$	89. $8 \times 0 =$
18. $2 \times 3 =$	36. $7 \times 4 =$	54. $11 \times 11 =$	72. $5 \times 8 =$	90. $11 \times 9 =$
			Score:	Time:

Step 2: ★ Complete the 21 skills questions with your best effort ★ Include working out when you see the ✎ symbol

1. Fill in the boxes to make each equation true a. $0 + \square = 5$ b. $0 + \square = 10$ c. $0 + \square = 2$	2. a. $7 + 2 =$ b. $6 + 6 =$ c. $59 + 6 =$ d. $57 + 37 =$	3. What number is shown below? Use digits then words 	4. ✎ $2743 + 3048$
5. a. $3 - 0 =$ b. $16 - 9 =$ c. $32 - 27 =$ d. $74 - 50 =$	6. ✎ $1524 - 631$	7. a. $0 \times 7 =$ b. $3 \times 11 =$ c. $3 \times 3 =$ d. $8 \times 12 =$	8. ✎ 3×982

9. a. $10 \div 5 =$

b. $33 \div 3 =$

c. $33 \div 11 =$

d. $85 \div 7 =$ rem.

10. ✎ $8272 \div 8$

11. Fill in the boxes to make each equation true

a. $2 \times \square = 56$

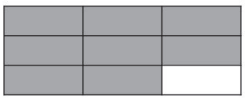
b. $3 \times \square = 93$

c. $5 \times \square = 85$

12. a. List the factors of 35

b. List the first 7 positive multiples of 12

13. What fraction is represented in the diagram below?



14. ✎ Calculate $\frac{3}{6} + \frac{2}{6}$. Illustrate your calculation using the rectangle below.

$\frac{3}{6} + \frac{2}{6} =$

15. ✎ Calculate the following. Illustrate your calculations using the rectangle below.

a. $\frac{1}{10}$ of $40 =$ b. $\frac{7}{10}$ of $40 =$

16. Fill in the box to create an equivalent fraction

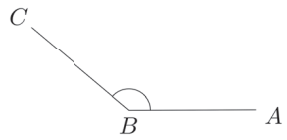
$$\frac{2}{7} = \frac{\square}{84}$$

17. Write the following as a simplified fraction

$$\frac{18}{63} =$$

18. ✎ Calculate $\frac{3}{30} + \frac{4}{6}$. Please give your answer in simplified form.

19. a. Circle the word that classifies $\angle ABC$ below:

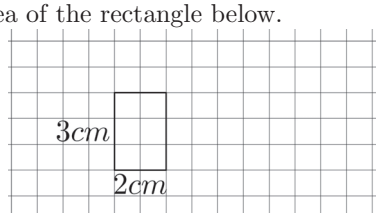


straight right acute obtuse

b. Estimate the size of angle ABC.

$\angle ABC \approx$

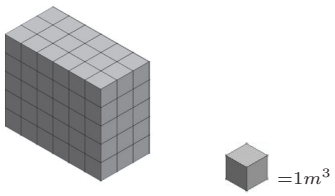
20. ✎ Determine the perimeter and area of the rectangle below.



$P =$

$A =$

21. ✎ Calculate the volume of the shape below.



$V =$

Step 3 : ★ Complete these 23 questions

★ Do not use a calculator ★ Include working out when you see the ✎ symbol ★ Simplify all fractional answers

1. Calculate

a. $-5-1=$

b. $-2-5=$

2. Calculate

a. $-3+-5=$

b. $-4+-4=$

3. Calculate

a. $1^3=$

b. $\sqrt{49}=$

4. ✎ Calculate $16\div 4\times 2$

5. Circle any words that describe the number 62.

even square mult. of 5

6. Write 42 as a product of powers of prime numbers.

7. a. Find the HCF of 6 and 12.

b. Find the LCM of 7 and 21.

8. Fill in the boxes to make each equation true.

a. $10=\frac{\square}{5}$

b. $2\frac{4}{5}=\frac{\square}{5}$

c. $1\frac{\square}{5}=\frac{6}{5}$

9. ✎ $\frac{1}{3}+\frac{5}{8}$

10. $\frac{6}{8}\times\frac{2}{3}$

11. ✎ $\frac{2}{7}\div\frac{4}{6}$

12. ✎ $3\frac{2}{7}+1\frac{6}{7}$

13. a. What is the place value of the 9 in 0.3692?

b. Round 0.5896 to 3 decimal places (3 dp.)

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

17.353 17.35

15. a. $8070\div 10=$

b. $5\times 10=$

c. $7.1\times 100=$

16. Complete the table below

P	F	D
92%		

17. ✎ $0.7+4.98$

18. ✎ 4.58×0.06

19. ✎ $0.2394\div 0.06$

20. ✎ Calculate 6% of 94

21. a. ✎ Substitute $x=9$ into $x-5$ and evaluate.

b. ✎ Substitute $x=48$ into $\frac{x}{6}$ and evaluate.

22. ✎ Solve the equations below and include working that shows your use of an opposite operation.

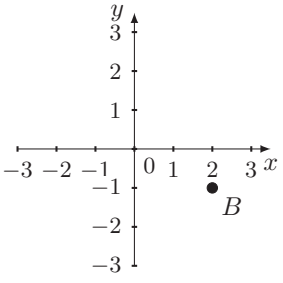
a.

$$x-3=6$$

b.

$$\frac{x}{6}=7$$

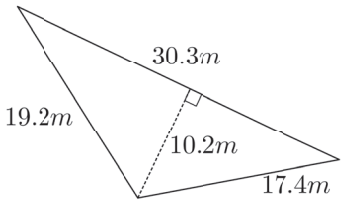
23. Plot the point $A=(2,-2)$ below and state the coordinates of point B.



$B=(\quad,\quad)$

Step 4: ★ Complete these 5 questions ★ You may use a calculator ★ Include working out when you see the ✎ symbol

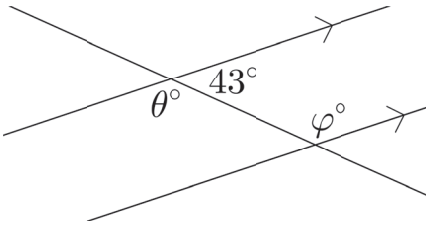
24. ✎ Calculate the perimeter and area of the shape below. Give your answers to the nearest whole number.



$P =$

$A =$

25. Consider the diagram below.

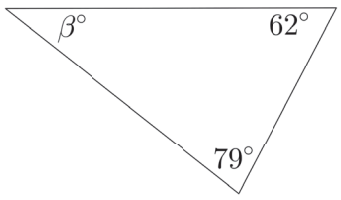


a. State the size of the unknown angles.

$\theta^\circ =$ $\varphi^\circ =$

b. What is the relationship between θ and φ?

26. a. ✎ What is the size of angle β?



b. Which word(s) classifies the triangle?

scalene right isosceles equilateral

27. A bag contains 9 balls numbered 1 to 9. A ball is randomly selected.

a. What is the sample space?

b. What is the probability of selecting a ball with an odd number?

28. ✎ Calculate the following statistics for the below data set

$$0, 2, 9, 3, 2, 1$$

a. median =

b. mean to 1 dp. $\approx$

c. mode =

d. range =