

# Year 8 Spring Term Homework Booklet

Name:

Form:

Week Homework	Due Date	Complete
1		
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Half Term		

Week Homework	Due Date	Complete
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Remember to show all your calculations for each question.

# Half Term One

The screenshot shows a web browser window with the URL <http://www.mathsbox.org.uk/GCSE10questions/7/Half%20term%201>. The page content is titled "Week 1" and lists ten math problems:

- 1 **Expand and simplify**  $3(2a + b) + 2(a + 3b)$
- 2 **Work out**  $1512 \div 63$
- 3 **Work out**  $48000 \div 800$
- 4 4 litres = ? ml
- 5 **Work out**  $2.9 \times 4.5$
- 6 **Round** 4.553 correct to 1 decimal place
- 7 **Solve**  $4(x - 3) = 12$
- 8 **Work out**  $3 + 4 \times 2$
- 9 **Evaluate**  $2^4$
- 10 What is  $\frac{2}{3}$  of £210?

Answer	Working Out
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The screenshot shows a web browser window with the URL <http://www.mathsbox.org.uk/GCSE10questions/Y7/Half%20term%20...>. The page content is titled "Week 2" and lists ten math problems:

- 1 **Expand and simplify**  $2(2a + 3b) + 4(a + b)$
- 2 **Work out**  $1125 \div 45$
- 3 **Work out**  $250000 \div 5000$
- 4 1.8 litres = ? ml
- 5 **Work out**  $6.5 \times 6.5$
- 6 **Round** 12.949 correct to 1 decimal place
- 7 **Solve**  $3(x + 2) = 15$
- 8 **Work out**  $30 - 4 \times 5$
- 9 **Evaluate**  $3^4$
- 10 What is  $\frac{4}{5}$  of £60?

Answer	Working Out
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The screenshot shows a web browser window with the URL <http://www.mathsbox.org.uk/GCSE10questions/Y7/Half%20term%201>. The page content is titled "Week 3" and contains the following list of math problems:

- 1 **Expand and simplify**  $2(a + 3b) + 3(a - b)$
- 2 **Work out**  $1664 \div 64$
- 3 **Work out**  $300000 \div 50000$
- 4 **6000 ml = ? litres**
- 5 **Work out**  $6.5 \times 2.8$
- 6 **Round** 0.949 correct to 2 decimal places
- 7 **Solve**  $5(2x - 1) = 45$
- 8 **Work out**  $30 - 2 \times 5 + 8$
- 9 **Evaluate**  $5^3 + 2^2$
- 10 **What is**  $\frac{3}{7}$  **of** £420?

Answer	Working Out
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http://www.mathsbox.org.uk/GCSE10questions/Y7/Half%20term%20... MainHome week4

**Week 4**

- 1 **Expand and simplify**  $2(5a + 3b) + 3(2b - a)$
- 2 **Work out**  $2160 \div 48$
- 3 **Work out**  $1000000 \div 50000$
- 4  $600 \text{ ml} = ? \text{ litres}$
- 5 **Work out**  $2.5 \times 8.2$
- 6 **Round** 0.0979 correct to 2 decimal places
- 7 **Solve**  $4(2x - 1) = 12$
- 8 **Work out**  $30 - 10 + 5 \times 5$
- 9 **Evaluate**  $4^2 + 2^4$
- 10 What is  $\frac{7}{9}$  of £108?

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Answer	Working Out
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Week 5

- 1 **Expand and simplify**  $2(5a - b) + 4(2b + a)$
- 2 **Work out**  $4356 \div 66$
- 3 **Work out**  $600000 \div 120$
- 4 5.8 litres = ? ml
- 5 **Work out**  $4.9 \times 5.1$
- 6 **Round** 10.025 correct to 2 decimal places
- 7 **Solve**  $2(8x + 3) = 54$
- 8 **Work out**  $30 - 10 \times 5 + 40$
- 9 **Evaluate**  $2^6$
- 10 What is  $\frac{4}{15}$  of £900?

Answer	Working Out
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Week 6

- 1 **Expand and simplify**  $2(3a - b) + 3(2b - a)$
- 2 **Work out**  $2890 \div 34$
- 3 **Work out**  $5000000 \div 250000$
- 4 0.25 litres = ? ml
- 5 **Work out**  $5.5 \times 5.5$
- 6 **Round** 19.995 correct to 2 decimal places
- 7 **Solve**  $2(3x + 7) = 8$
- 8 **Work out**  $3 \times 10 - 5 \times 5$
- 9 **Evaluate**  $5^4$
- 10 What is  $\frac{3}{7}$  of £4900?

Answer	Working Out
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Week 7

- 1 **Expand and simplify**  $6(3a + b) + 3(2a - 3b)$
- 2 **Work out**  $2975 \div 35$
- 3 **Work out**  $8000000 \div 5000$
- 4 60 ml = ? litres
- 5 **Work out**  $4.5 \times 4.6$
- 6 **Round** 0.258 correct to 2 decimal places
- 7 **Solve**  $2(3x - 5) = 2$
- 8 **Work out**  $3 + 2 \times 10 - 1 \times 5$
- 9 **Evaluate**  $3^4 + 1^6$
- 10 What is  $\frac{5}{9}$  of £810?

Answer	Working Out
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## Termly Project.

Please complete over the course of the first half term.

### Half Term Two

The screenshot shows a web browser window with the URL <http://www.mathsbox.org.uk/GCSE10questions/Y7/Half%20term%201>. The page content is titled "Week 1" and lists 10 math problems:

- 1 **Work out**  $\frac{1}{5} + \frac{2}{3}$
- 2 If  $a = 5$  what is the value of  $a^2 + 3$ ?
- 3 **Simplify**  $4^2 \times 4^6$
- 4 Complete using  $<$ ,  $=$  or  $>$  3.4 litres ? 3450 ml
- 5 **Solve**  $6y - 5 = 25$
- 6 **Round** 44.993 correct to 1 significant figure
- 7 What is 25% of £45?
- 8 Complete this **arithmetic** sequence 10 , ? , ? , 22..
- 9 **Estimate**  $453 \times 28$
- 10 Express  $2\frac{1}{5}$  as an **improper fraction**

Answer	Working Out
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The screenshot shows a web browser window with the URL <http://www.mathsbox.org.uk/GCSE10questions/Y7/Half%20term%201>. The page content is titled "Week 2" and contains the following list of questions:

- 1 **Work out**  $\frac{2}{5} + \frac{3}{8}$
- 2 If  $a = 7$  what is the value of  $a^2 - a$ ?
- 3 **Simplify**  $5^5 \times 5^6$
- 4 Complete using  $<, =$  or  $>$  2 tonnes ? 1995 kg
- 5 **Solve**  $2y + 4 = 2$
- 6 **Round** 44.993 correct to 1 decimal place
- 7 What is 15% of £62?
- 8 Complete this **arithmetic** sequence 7 , ? , ? , 25..
- 9 **Estimate**  $6490 \div 28$
- 10 Express  $3\frac{3}{4}$  as an **improper fraction**

Answer	Working Out
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The screenshot shows a web browser window with the URL <http://www.mathsbox.org.uk/GCSE10questions/Y7/Half%20term%201/>. The page content is titled "Week 3" and lists the following 10 problems:

- 1 **Work out**  $\frac{2}{3} + \frac{1}{10}$
- 2 If  $a = 3$  what is the value of  $a^2 + 2a$ ?
- 3 **Simplify**  $6^5 \times 6$
- 4 Complete using  $<, =$  or  $>$  3.45 m? 350 cm
- 5 **Solve**  $3y + 8 = 2$
- 6 **Round** 44.993 correct to 2 significant figures
- 7 What is 75% of £102?
- 8 Complete this **arithmetic** sequence 2, ?, ?, 23..
- 9 **Estimate**  $2459 \div 54.5$
- 10 Express  $4\frac{1}{5}$  as an **improper fraction**

Answer	Working Out
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The screenshot shows a web browser window with the URL <http://www.mathsbox.org.uk/GCSE10questions/Y7/Half%20term%201/>. The page content is titled 'Week 4' and lists the following 10 problems:

- 1 **Work out**  $\frac{3}{10} + \frac{1}{3}$
- 2 If  $a = 10$  what is the value of  $2a^2 - 50$ ?
- 3 **Simplify**  $4^5 \times 4 \times 4^5$
- 4 Complete using  $<, = \text{ or } >$   $0.87 \text{ km } ? 90 \text{ m}$
- 5 **Solve**  $2y + 3 = 2$
- 6 **Round** 106.9 correct to 2 significant figures
- 7 What is 15% of £56?
- 8 Complete this **arithmetic** sequence ,10, ?, ?, 43..
- 9 **Estimate**  $559 \times 549$
- 10 Express  $3\frac{4}{9}$  as an **improper fraction**

Answer	Working Out
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**Week 5**

- 1 **Work out**  $\frac{2}{7} + \frac{1}{3}$
- 2 If  $a = 6$  what is the value of  $a^2 - 5a$ ?
- 3 **Simplify**  $10^5 \times 10^2 \times 10$
- 4 Complete using  $<, =$  or  $>$  85 mm ? 8.4 cm
- 5 **Solve**  $5(3y + 2) = 10$
- 6 **Round** 104.274 correct to 2 decimal places
- 7 What is 35% of £64?
- 8 Complete this **arithmetic** sequence 5, ?, ?, 50..
- 9 **Estimate**  $29 \times 2510$
- 10 Express  $2\frac{2}{11}$  as an **improper fraction**

Answer	Working Out
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**Week 6**

- Work out**  $\frac{3}{10} + \frac{1}{4}$
- If  $a = 3$  what is the value of  $3a^2 - 5a$ ?
- Simplify**  $7 \times 7^2 \times 7^7$
- Complete using  $<, =$  or  $>$  2.05 m ? 210 cm
- Solve**  $6(4x - 1) = 6$
- Round** 0.00452 correct to 1 significant figure
- What is 15% of £244?
- Complete this **arithmetic** sequence 3, ?, ?, 27..
- Estimate**  $7654 \div 44.9$
- Express  $3\frac{3}{8}$  as an **improper fraction**

Answer	Working Out
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**Week 7**

- 1 **Work out**  $\frac{1}{3} + \frac{3}{10}$
- 2 If  $a = 2$  what is the value of  $10a - a^2$ ?
- 3 **Simplify**  $2 \times 2^6 \times 2^5$
- 4 Complete using  $<, =$  or  $>$  6.02 km ? 6200 m
- 5 **Solve**  $2(8x - 1) = 2$
- 6 **Round** 69985 correct to 1 significant figure
- 7 What is 35% of £324?
- 8 Complete this **arithmetic** sequence 1, ?, ?, 46..
- 9 **Estimate**  $5876224 \div 29545$
- 10 Express  $10\frac{1}{5}$  as an **improper fraction**

Answer	Working Out
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### **Termly Project.**

**To be completed the second Spring Half Term.**

**Create a revision booklet including six topics from this half term.**

**Booklet must include descriptions on how to complete work and worked examples.**

**It must visually be colourful and draw attention to key points needed to revise the topics chosen.**

**Hint: Look at revision guides for maths on the internet.**