

Name	
Form	
Teacher	

**Maths**

**Homework Booklet**

**Year 8 Spring 2**

**Set 4,5**

Topic	Score achieved	Sparx %
1. Fractions, decimals and percentages	/12	%
2. Standard form	/8	%
3. Money calculations	/4	%
4. Conversion graphs	/11	%
5. Mixed Revision	/20	%
6. Mixed Revision	/20	%



## Week 1

Write these fractions as decimals

(a)  $\frac{3}{10}$

(b)  $\frac{3}{5}$

(c)  $\frac{81}{100}$

(d)  $\frac{9}{20}$

(e)  $\frac{1}{8}$

(f)  $\frac{19}{40}$

Write these percentages as fractions

(a) 70%

(b) 60%

(c) 95%

(d) 24%

(e) 79%

(f) 82%

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## Week 2

Question 1: Write each of the following numbers in standard form.

(a) 40000

(b) 2000000

(c) 8000000

(d) 7000

Question 2: Write each of the following as ordinary numbers

(a)  $3 \times 10^4$

(b)  $9 \times 10^3$

(c)  $6 \times 10^6$

(d)  $2 \times 10^{10}$

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## Week 3

- 1) Nisha buys a drink for £2.10

She pays the exact amount with four coins.

List the coins that she used.

- 2) Zander buys a book for £10.01

He pays the exact amount with one note and four coins.

List the note and coins that he used.

- 3)

Menu	
Tea	£2.80
Coffee	£3.35
Biscuit	90p
Scone	£3.10

Vicky buys 2 cups of tea and a scone.

How much will she have to pay?

- 4) Andrew buys these items at a coffee shop.

Latte	£3.75
Wafer	90p
Scone	£2.79
Apple	80p

Andrew pays with a £20 note and receives £10.76 change.

Did he receive the correct amount of change?

Show your working.

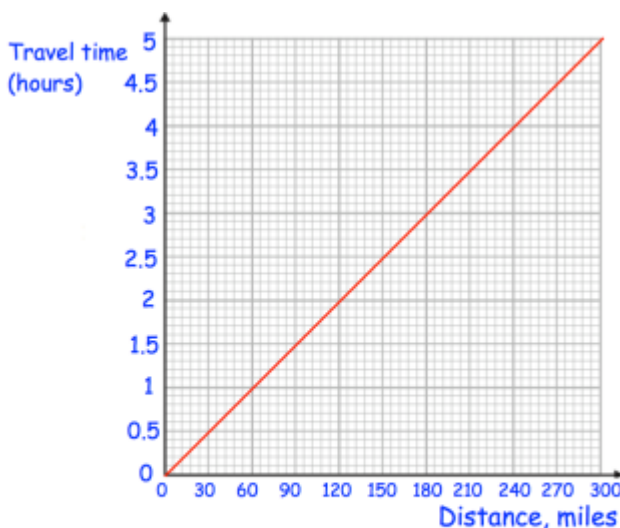
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## Week 4

### Question 1:

- (a) How long should a 120 mile journey take?
- (b) How long should a 270 mile journey take?
- (c) Carlos has spent 1 hour travelling. What distance is he expected to have travelled?
- (d) Rosie has spent 3.5 hours travelling. What distance is she expected to have travelled?



### Question 2:

- (a) Change £20 into Polish złoty
- (b) Change £90 into Polish złoty
- (c) Change 300zł into UK pounds
- (d) Change 450zł into UK pounds
- (e) Change £50 into Polish złoty
- (f) Change £200 into Polish złoty
- (g) Change 800zł into UK pounds





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# Week 5

<b>1</b> $y = 38 - 2x^2$ Find the value of $y$ when $x = 4$	<b>2</b> Work out $8 \times (1 + 2) \times 6$	<b>3</b> Work out $2 \times 2 + 3 \times 7$	<b>4</b> Work out $\frac{7}{8} \times \frac{1}{2}$
<b>5</b> Round 0.49529 correct to 1 significant figure	<b>6</b> Find the missing numbers 68, __, 46, 35, 24, __	<b>7</b> Solve $8x - 7 = 1$	<b>8</b> What is the 5 <sup>th</sup> cube number?
<b>9</b> Find the missing terms ?, 18, 9, 0, ?, -18	<b>10</b> Expand and simplify $7(3x + 7) + 3(3x - 4)$	<b>11</b> Find the missing terms ?, 6, 15, ?, 33, 42	<b>12</b> Calculate $1320 \div 3$
<b>13</b> Express $\frac{36}{13}$ as a mixed number	<b>14</b> Simplify $3a - 2a + a$	<b>15</b> Solve $7x + 6 = 41$	<b>16</b> Work out $100000 + 800 + 50 + 0.5$
<b>17</b> Solve $2(5x + 5) = 100$	<b>18</b> Complete : 4 cm = ____ mm	<b>19</b> Round 0.75 correct to 1 significant figure	<b>20</b> Expand $10(6 - 7x)$

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# Week 6

1 Calculate 25% of £180	2 $y = \frac{5x^2}{2}$ Find the value of $y$ when $x = 2$	3 Simplify $10^4 \times 10^3 \times 10^2$	4 Work out $\frac{8}{9} \times \frac{1}{4}$
5 Round 0.41 correct to 2 significant figures	6 Work out $8 \times 4 + 5 \times 2$	7 Complete : 5 km = ____ m	8 Find the missing terms -3, 6, ?, ?, 33, 42
9 Calculate $40 \times 65$	10 Expand $6(7x - 4)$	11 Solve $10(4x - 4) = -160$	12 Find the missing terms 4, ?, 12, ?, 20, 24
13 Complete $\sqrt[3]{216} =$	14 Calculate 95% of £220	15 Round 1.329 correct to 2 decimal places	16 Does the point $(-5, -26)$ lie on the line $y = 7x + 8$
17 Calculate $2000 \times 100$	18 Solve $3x - 6 = -15$	19 Simplify $r^3 s^4 \times r s^4$	20 Estimate $\frac{503 \times 306}{18}$

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