/rite your name here Surname		Other names	
Pearson Edexcel Functional Skills	Centre Number		andidate Number
Mathema	tics		
19 – 23 March 2018 Time: 1 hour 30 minutes	5		Paper Reference
You must have: Pen, calculator, HB pencil, era		ed in cm and	mm,

## My signature confirms that I will not discuss the content of the test with anyone until the end of the 5 day test window.

Signature:

#### Instructions

- Use a black ball-point pen.
- Fill in the boxes at the top of this page with your name, centre number and candidate number.
- Sign the declaration.
- Answer all questions.
- Answer the questions in the spaces provided
  - there may be more space than you need.
- Calculators may be used.

#### Information

- The total mark for this paper is 48.
- The marks for each question are shown in brackets
- use this as a guide to how much time to spend on each question. You must show clearly how you get your answers because marks will be awarded for your working out.
- Check your working and your answers at each stage.
- This sign shows where marks will be awarded for showing your check.

#### Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.



 $\checkmark$ 



Turn over 🕨





# FUNCTIONAL SKILLS ONLINE COURSES

tional Skills English Initial Assessment	assessmen curre From this dia	r results from this initial t, we estimate you are ntly at Level 1.5. gnostic, we think one of ng courses would be suitable:
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#### **SECTION A: The beehive**

# Answer all questions in this section.

# Write your answers in the spaces provided.

1 Alia keeps bees in a beehive.

She needs to check the beehive on a day when

- the wind speed is less than 15 km/h
- the temperature is greater than 10 °C.

Alia has this weather forecast.

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
	MOH	Tue				15	12
wind speed (km/h)	26	19	16	13	19	15	13
	0	10	11	14	9	8	8
temperature (°C)	9	10					

(2)

(a) On which day should Alia check the beehive?

Write your answer in the box below.

Thursday

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DO NOT WRITE IN THIS AREA

There are 6000 bees in the beehive. 15% of the bees in the beehive are male bees.

Alia thinks there are 900 male bees in the beehive.

(b) Is Alia correct? Show why you think this.

(2)

6000 × 0.15 = 900 Alia is correct. (Total for Question 1 is 4 marks)

.

2 Alia fills 5 jars with honey from the beehive.

She wants to know the mean weight of the honey in the 5 jars.

jar	1	2	3	4	5
weight of honey (g)	440	460	465	455	450

(a) Work out the mean weight of the honey in the 5 jars. Show a check of your working.

(4)

 $\frac{440+460+465+455+450}{5} = \frac{2270}{5} = 4544 g.$ Show your check in the box below.  $| \mathbf{V} |$ 454 \* 5 = 2270

Alia also wants to know the range of the weight of the honey in the 5 jars.

jar	1	2	3	4	5
weight of honey (g)	440	460	465	455	450

(b) Work out the range of the weight of the honey in the 5 jars.

(2)

Use the box below to show clearly how you get your answer.

465 - 440 = 25g (Total for Question 2 is 6 marks)

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3 Alia wants to send a parcel to her friend. The parcel is <u>2 jars</u> of honey in a box.

Each jar of honey weighs 625 grams. The empty box weighs 70 grams.

Alia finds the following prices for sending parcels.

	weight of parcel			
type of postage	less than 1000 g	1000 g to 2000 g		
first class standard	£3.40	£5.50		
second class standard	£2.82	£3.82		
first class signed for	£4.40	£6.50		
second class signed for	£2.90	£3.90		

Alia wants to send the parcel first class standard.

How much will it cost to send this parcel using first class standard?

(2)

2×625 = 1250g 1250+70=1320g. £5,50 for first class standard. (Total for Question 3 is 2 marks)

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4 The beehive has wooden frames. Each frame is made from 4 pieces of wood.

All corners of the frame are right angles. The diagram shows the lengths of the sides of the frame.

Alia wants to make <u>2 new frames.</u> She has a <u>2.4 metre</u> length of wood. Alia thinks this will be enough to make the 2 frames.



Diagram **not** accurately drawn

(4)

Is Alia correct? Show why you think this.

43+35+14+14=106cm. 106 x 2 = 212cm = 2.12m. 22.4m Yes . (Total for Question 4 is 4 marks)



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6 Marta manages the rentals of beach huts.

There are 96 beach huts. 24 of these beach huts are available to rent.

Marta thinks that  $\frac{1}{4}$  of the beach huts are available to rent.

Is Marta correct? Show why you think this.

(2)

 $96 \cdot 4 = 24$ Marta is correct.

(Total for Question 6 is 2 marks)

7 The opening hours for the beach office change during the year.

These are the opening times for the beach office.

Peak season	
Monday to Sunday	9.30 am to 6.30 pm
<b>Off-peak season</b> Monday to Friday	9.30 am to 3.30 pm
Saturday and Sunday	closed

Marta wants to compare the number of hours the office is open each week for the two seasons.

(a) For how many more hours is the office open **each week** in the peak season than in the off-peak season? (4)

Peak 9 \$\$ = \$ 63 088-Peak 6 ×5 + 0 ×2=30 63-30 = 33 hours.

Marta needs to cover the whole floor in 3 of the beach huts with tiles.

The floor in each beach hut is rectangular 400 cm by 200 cm. Each tile is square 50 cm by 50 cm.



Each tile costs £8.99

Marta has £850 to spend on the tiles.

(b) Is £850 enough to buy all the tiles Marta needs? (6)

400 - 50 = 8 200 : 50 = 4 8×4 = 32 Wes. 32×3 = 96 Wes.  $\pm 8.99 \times 96 = 22 \pm 863.04$  $22 \pm 850$ . No

#### Section C: At a cinema

#### Answer the questions in this section.

#### Write your answers in the spaces provided.

8 Teddy works at a cinema. He sells frozen drinks in 4 different flavours.

Teddy wants to compare the number of sales of each flavour. He has this information about the sales last week.

flavour	raspberry	cherry	lemon	orange
number of sales	195	80	155	110

(a) Draw a graph or chart to compare the number of sales of each flavour last week.

(3)

Use the graph paper below to draw your graph or chart.



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Teddy has a machine to make fizzy drinks. The machine uses <u>1 part</u> syrup to 5 parts water to make each drink.

A medium drink is 500 ml.

Teddy has <u>7 litres of syrup f</u>or the machine. He thinks this is enough syrup to make 85 medium drinks.

(b) Is Teddy correct? Show why you think this.

(5)

Use the box below to show clearly how you get your answer.

7×5:35 Where of water. 35+7 = 42 litres of drink 500ml = 0.5 litres. 42:0.5 = 84 drinks < 85.No.

(Total for Question 8 is 8 marks)

9 Reece goes to see a film at the cinema. He wants to buy a large drink and a large popcorn.

Reece sees this price list and a special offer.

and large popcorn?

		Creating offer
all medium	large	Special offer!
.99 £2.99	£3.99	Get a large drink and a large popcorn for £7.50
.49 £3.49	£4.49	
	.99 £2.99	.99 £2.99 <u>£3.99</u>

(4)

Show a check of your working.

 $f_{3.99} + f_{4.49} = f_{8.48}$ . £8.48-£7.50 = £0.98. asp. Show your check in the box below. £0.98+£7.50 =£8.48 |

Reece wants to know what time he will get to the bus stop after the film finishes.

The film

DO NOT WRITE IN THIS AREA

- starts at 3.30 pm
- lasts for 135 minutes.

It will take Reece 10 minutes to get to the bus stop from when the film finishes.

Reece thinks he will get to the bus stop at 5.50 pm.

(b) Is Reece correct? Show why you think this.

(4)

135 mons = 24 15mons. 3:30 Thism 5:45 Bus 5:55 Reece is not correct. (Total for Question 9 is 8 marks) TOTAL FOR PAPER IS 48 MARKS







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