Year 7 Mixed Practice

Topics: 1 - 3

Mark Scheme and revision:
www.addvancemaths.com/year7/

Name:		
Teacher:		
Score:	/104	%

Instructions:

- Use a black or blue ballpoint pen.
- Answer all the questions in the spaces provided.
- You will need a ruler, protractor, pencil, and compass

- **Information:**
- The marks for each question are shown in brackets.
- The total mark available for this exam is 60.

- **Advice** :
- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Q.	Total Marks:
1.)	/19
2.)	/19
3.)	/22
4.)	/32
5.)	/12

Year 7 Mixed Topic Practice

(Topic 1: Integers and BIDMAS)

1. Calculate the following:

(a) $16 - 37$

..... 1

(b) $5 + (-35)$

(c) $17 - 39 + (-55)$

..... 2

(d) $(-11) - (-10) + (-9)$

..... 3

..... 3

(e) $(-5)\times(-4)$

..... 2

(f) $(0)\times(-9)$

(g) $(4\times-1)\times(-2)\times(0)$

..... 2

(h) $(-12)\times(-7)\times(-10)$

..... 3

..... 3

(Mixed Topic 1-2)

2. Calculate the following:

(a) $(-11)\div(-11)$

..... 1

(b) $(56)\div(-7)$

(c) $(-30)\div 5+12\div(-4)$

..... 2

(d) $(-48)\div 6+(-18)\div(-3)$

..... 3

..... 3

If $a = 6$ and $b = -7$, evaluate the following expression leaving your answer in its simplest form:

(e) $2a - b$

..... 2

(f) $b^2 + 8a$

(g) $3a^2 - 7ab$

..... 2

..... 3

(h) $(b^2+8a)\times 5$

..... 3

(Topic 2: Introduction to Algebra)

3. If $a = 5, b = 1.25, and\ c = 8$, evaluate the following expression leaving your answer in its simplest form:

(a) $3a + 4b + 5c$

..... 3

(b) $2(a^2 + c)$

(c) $a \times c - 100b$

..... 3

(d) $10a - 6c - \frac{a}{4}$

..... 3

..... 3

If $e = 10, b = 4, and\ c = 2$, evaluate the following expression leaving your answer in its simplest form:

(e) ebc^2

..... 2

(f) $(10cb)x\ 20$

..... 2

(g) $1000e \div 100b \div 10c$

..... 3

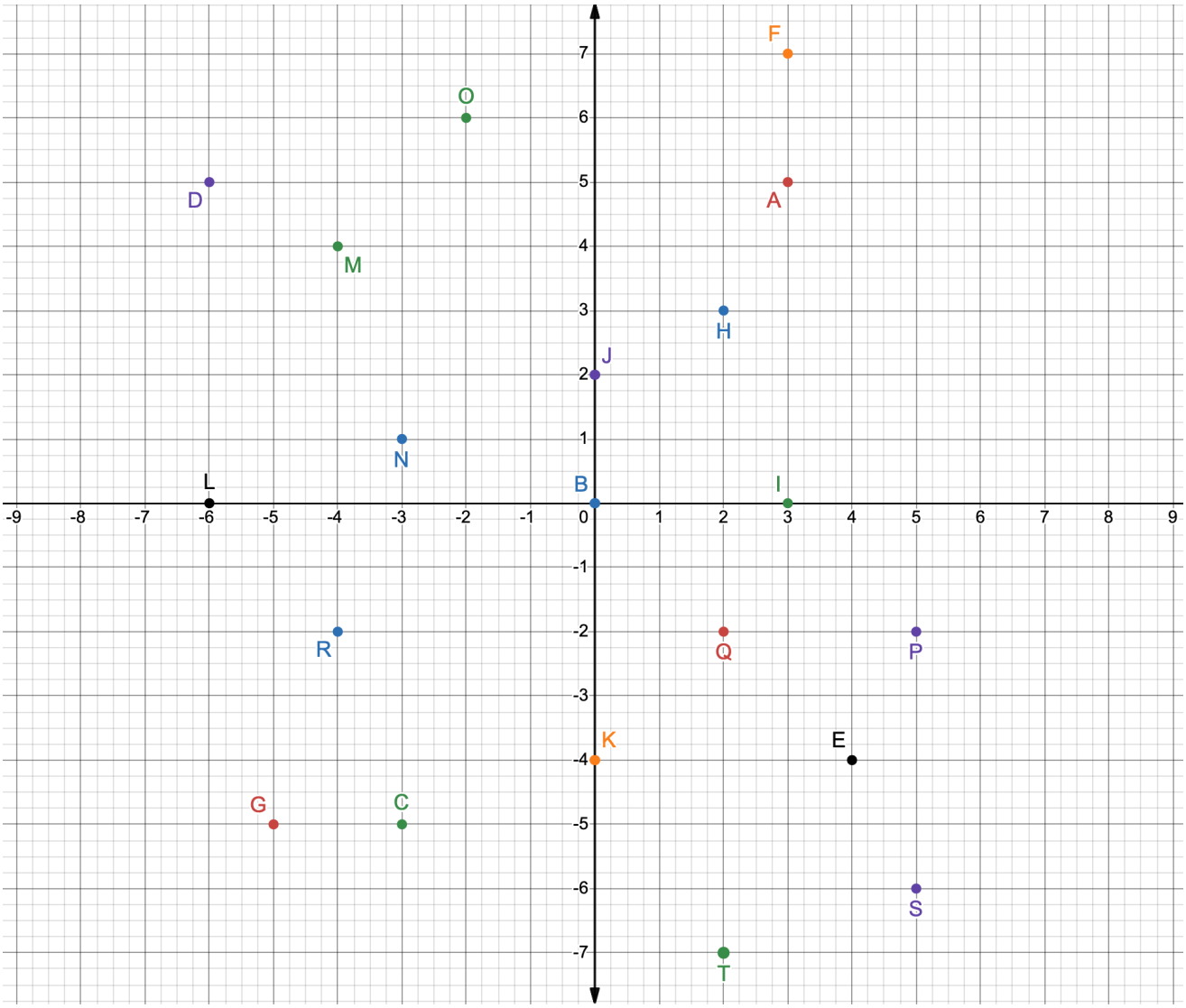
(h) $ebc + eb - \frac{cb}{2}$

..... 3

(Topic 3: Symmetry and Coordinates)

4. Write the Coordinates of the Following points:

(a)



(20 Marks)

A = ... B = ... C = ... D = ...

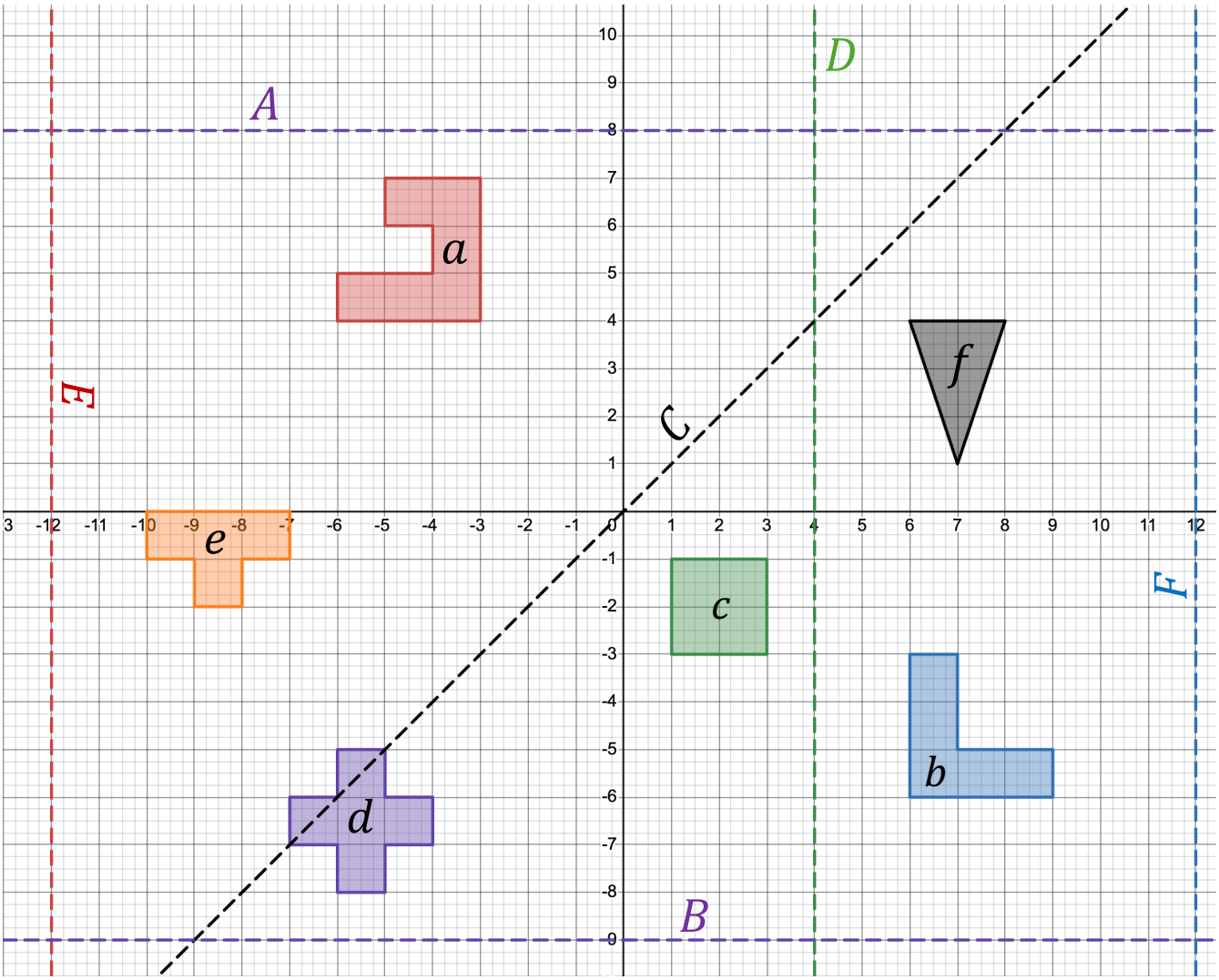
E = ... F = ... G = ... H = ...

I = ... J = ... K = ... L = ...

M =..... N = ... O = ... P = ...

Q = ... R = ... S = ... T = ...

(*b*)



I. Write the expressions for the following lines:
(the first has been done for you).

A: $y = 8$ B:..... C:.....

D:..... E:..... F:.....

(6)

I. Reflect Shape a in the line $x = -7$ and label the new shape x.

(2)

I. Reflect Shape c in the line $y = x$ and label the new shape y.

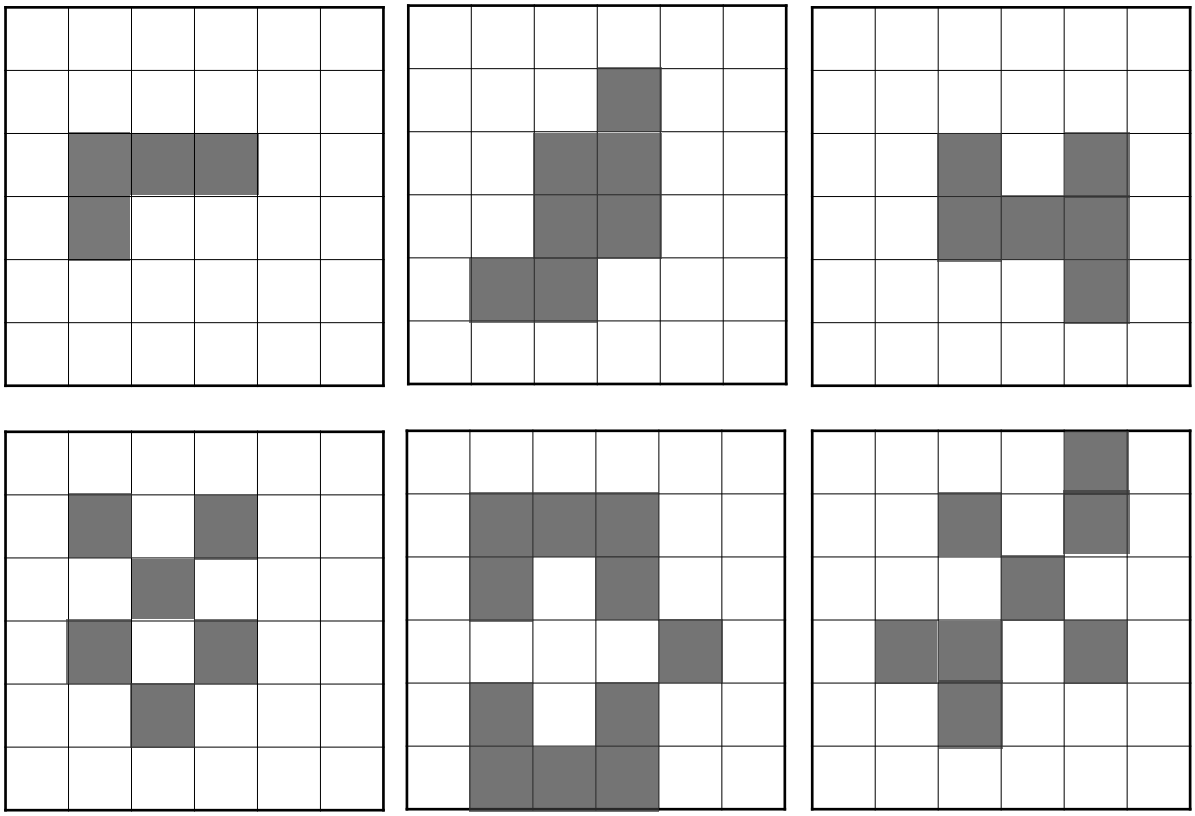
(2)

I. Reflect Shape e in the line $y = -3$ and label the new shape z.

(2)

5.

(a) Shade the required squares for the final shape to have a rotational symmetry of 2 (one square per diagram).



(6)

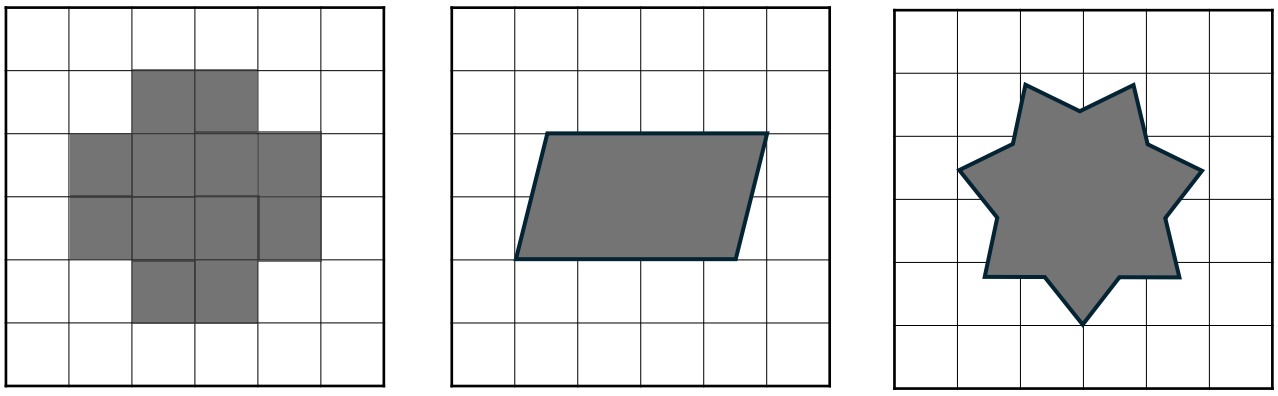
(b)

I. What is the rotational symmetry of an equilateral triangle: 1

II. How many lines of symmetry does a hexagon have: 1

III. What is the rotational Symmetry of a parallelogram: 1

(c) Draw all possible lines of symmetry for the following shapes:



(3)

End of Exam

Self-reflection

How did you revise for the exam? *(tick all that you did)*

- Reading class notes ○
- Online practice ○
- Doing practice questions ○
- ○ Getting help from your teacher
- ○ Recapping the previous exam
- Study group (with friends) ○
- Reading textbooks ○
- Watching videos ○

Were these revision techniques useful? *(circle your answer)*

Yes A bit No

How could you revise more effectively next time?

_____

_____

List three topics from this test that you are good at, and three that need more work.

1.)

2.)

3.)

5.)

5.)

6.)

"Failure is the stepping stone to success"

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