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Name:
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## Exam Style Questions

Finding the midpoint
of two numbers

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser
You may use tracing paper if needed

## Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

6. Work out the number that is halfway between 20 and 70

$$
\begin{aligned}
& 20+70=90 \\
& 90 \div 2=45
\end{aligned}
$$


(1)
2. Work out the number that is halfway between 11 and 37

$$
\begin{aligned}
11+37 & =48 \\
48 \div 2 & =24
\end{aligned}
$$

3. Work out the number that is halfway between 125 and 275

$$
\begin{gathered}
125+275=400 \\
400 \div 2=200
\end{gathered}
$$

200
4. Work out the number that is halfway between 1.9 and 2.7

$$
\begin{gathered}
1.0+2.7=4 \cdot 6 \\
4.6 \div 2=2 \cdot 3
\end{gathered}
$$

2.3
5. Work out the number that is halfway between 4.2 and 5.8

$$
\begin{gathered}
4 \cdot 2+5 \cdot 8=10 \\
10 \div 2=5
\end{gathered}
$$

6. Work out the number that is halfway between 3.9 and 4.8

$$
\begin{align*}
3.9+4.8 & =8.7 \\
8.7 \div 2 & =4.35
\end{align*}
$$

(1)
7. Work out the number that is halfway between -3 and 7

$$
\begin{gathered}
-3+7=4 \\
4 \div 2=2
\end{gathered}
$$

8. Work out the number that is halfway between -15 and -2

$$
\begin{aligned}
& -15+-2 \div-17 \\
& -17 \div 2=-8 \cdot 5
\end{aligned}
$$

$-8.5$
(1)
9. Work out the number that is halfway between -10 and 25

$$
\begin{aligned}
-10+25 & =15 \\
15 \div 2 & =7.5
\end{aligned}
$$

7.5
10. Work out the number that is halfway between 1.15 and 5.24

$$
\begin{align*}
& 1.15+5.24=6.39 \\
& 2.195  \tag{1}\\
& 2.39 \div 2=3.195
\end{align*}
$$

$$
3.195
$$

11. Work out the temperature which is halfway between $-3^{\circ} \mathrm{C}$ and $7^{\circ} \mathrm{C}$

$$
\begin{aligned}
-3+7 & =4 \\
4 \div 2 & =2
\end{aligned}
$$

$2 . \ldots . . .{ }^{\circ} \mathrm{C}$
(1)
12. Write down the number that is halfway between 1.6 and 1.7

$$
\begin{array}{r}
1.6+1 \cdot 7=3.3 \\
3.3 \div 2=1.65
\end{array}
$$

13. Caroline says that $20 \%$ is halfway between $10 \%$ and $3 / 5$

Is Caroline correct?
You must explain your answer.

$$
66 \%
$$

$$
\begin{aligned}
& 10+60=70 \\
& 70 \div 2=35
\end{aligned}
$$

Midway between $10 \%$ and $3 / 5$ ( $60 \%$ ) is $35 \%$ not $20 \%$
14. Jason and Gary think of two different numbers.

The midpoint of the two numbers is 23 .
Jason says his number is 9 .
What number is Gary thinking of?

$$
\begin{aligned}
& 23 \times 2=46 \\
& 46-9=37
\end{aligned}
$$

$$
37
$$

15. Wendy and Sally think of two different numbers.

The midpoint of the two numbers is 12.5
Wendy says her number is 5
What number is Sally thinking of?

$$
\begin{aligned}
& \text { der is Sally thinking of? } \\
& 12 \cdot 5 \times 2=25 \\
& 25-5=20
\end{aligned}
$$


(2)
16. Alison has $£ 1.40$

Scott has $£ 2.90$
How much should Scott give Alison so that they will have the same amount of money?

$$
\begin{aligned}
& 2.90+1 \cdot 40=f 4.30 \\
& z^{4} \cdot 30 \div 2=f 2.15 \\
& \neq 2.90-\neq z 2.15=75 p
\end{aligned}
$$


17. Judy has $£ 12.30$

Max has $£ 25.20$
How much should Max give Judy so that they will have the same amount of money?

$$
\begin{aligned}
& 25.20+12.30=37.50 \\
& 37.50 \div 2= \pm 18.75 \\
& 114111 \\
& 2815.20 \\
& \frac{-£ 18.75}{6.45}
\end{aligned}
$$

$$
\mathcal{L} 6.45
$$

