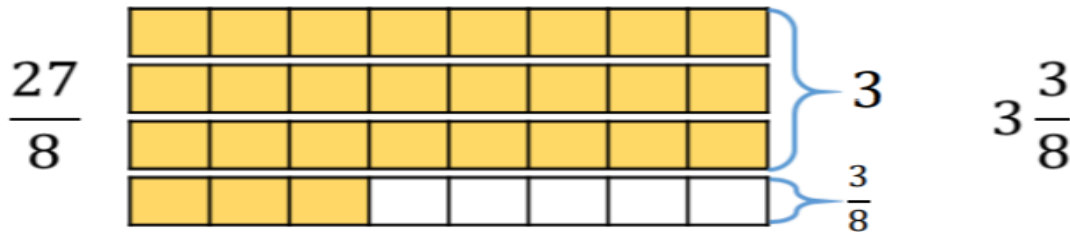


Converting mixed numbers to improper fractions and vice versa

This is for a little background knowledge: <https://www.bbc.co.uk/bitesize/topics/zhdwxnb/articles/zxcfjty>

This is the video you looked at last time: <https://www.youtube.com/watch?v=GpumUOiGS6Q>

- Tommy converts the improper fraction $\frac{27}{8}$ into a mixed number using bar models.

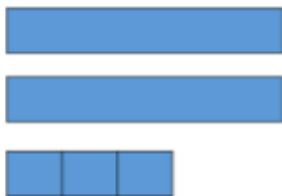


TASK 1 – Draw the bar model

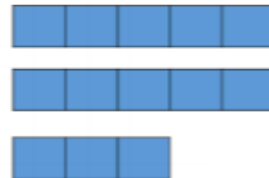
Use Tommy's method to convert $\frac{25}{8}$, $\frac{27}{6}$, $\frac{18}{7}$ and $\frac{32}{4}$

Now we will look at the reverse

Jack uses bar models to convert a mixed number into an improper fraction.



$$2 \frac{3}{5} = \square \text{ wholes} + \square \text{ fifths}$$



$$2 \text{ wholes} = \square \text{ fifths}$$
$$\square \text{ fifths} + \square \text{ fifths} = \square \text{ fifths}$$

TASK 2 – Draw the bar models

Use Jack's method to convert $2 \frac{1}{6}$, $4 \frac{1}{6}$, $4 \frac{1}{3}$ and $8 \frac{2}{3}$

TASK 3

$\frac{28}{3}$ is less than $\frac{37}{5}$
because 28 is less than 37



Do you agree with Amir?
Explain why.

ANSWERS

TASK 1

Use Tommy's method to convert $\frac{25}{8}$, $\frac{27}{6}$, $\frac{18}{7}$ and $\frac{32}{4}$

$$25/8 = 24/8 + 1/8 = 3 \text{ whole ones } 1/8$$

$$27/6 = 24/6 + 3/6 = 4 \text{ whole ones } 3/6 = 4 \frac{1}{2}$$

$$18/7 = 14/7 + 4/7 = 2 \text{ whole ones and } 4/7$$

$$32/4 = 8 \text{ whole ones}$$

TASK 2

Use Jack's method to convert $2\frac{1}{6}$, $4\frac{1}{6}$, $4\frac{1}{3}$ and $8\frac{2}{3}$

$$2\frac{1}{6} = 2 \times 6/6 + 1/6 = 12/6 + 1/6 = 13/6$$

$$4\frac{1}{6} = 4 \times 6/6 + 1/6 = 24/6 + 1/6 = 25/6$$

$$4\frac{1}{3} = 4 \times 3/3 + 1/3 = 12/3 + 1/3 = 13/3$$

$$8\frac{2}{3} = 8 \times 3/3 + 2/3 = 24/3 + 2/3 = 26/3$$

Task 3

Amir says,

$\frac{28}{3}$ is less than $\frac{37}{5}$
because 28 is less than 37



Do you agree?
Explain why.

Possible answer

I disagree because
 $\frac{28}{3}$ is equal to $9\frac{1}{3}$
and $\frac{37}{5}$ is equal to
 $7\frac{2}{5}$

$$\frac{37}{5} < \frac{28}{3}$$