

Levers & Pulleys

Bands 1, 2, 3, 4, 5 · 10 questions · Free sample

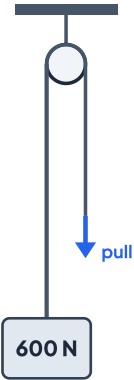
Name _____ Date _____ Score _____ /10

Each picture asks its own question. A beam balances when weight times distance is the same on both sides of the pivot. A pulley system holds its load with the load divided by the rope segments holding the moving block. Circle the letter of your answer.

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1 Band 1

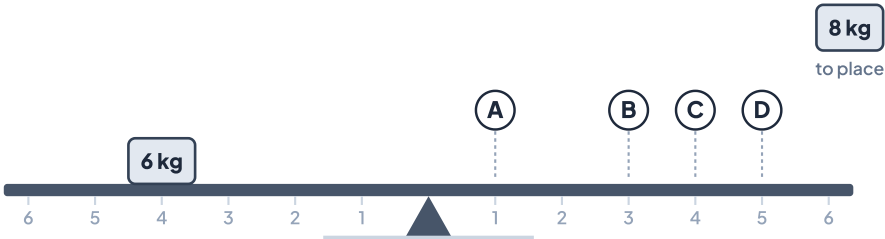
What force holds the 600 N load?



- ☐ A 300 N
- ☐ B 600 N
- ☐ C 1200 N
- ☐ D 1800 N

2 Band 1

Where must the 8 kg weight go to balance the beam?

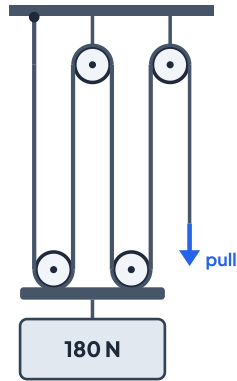


- ☐ A A
- ☐ B B
- ☐ C C
- ☐ D D

3

Band 2

Pull the rope 36 m. How far does the load rise?



(A)

9 m

(B)

12 m

(C)

36 m

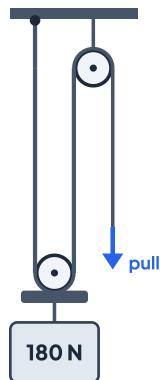
(D)

144 m

4

Band 2

Pull the rope 10 m. How far does the load rise?



(A)

5 m

(B)

10 m

(C)

15 m

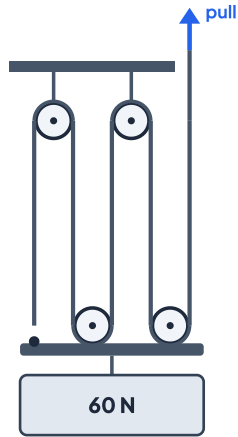
(D)

20 m

5

Band 3

What force holds the 60 N load?



(A)

12 N

(B)

15 N

(C)

30 N

(D)

60 N

6

Band 3

Where must the 2 kg weight go to balance the beam?



(A)

A

(B)

B

(C)

C

(D)

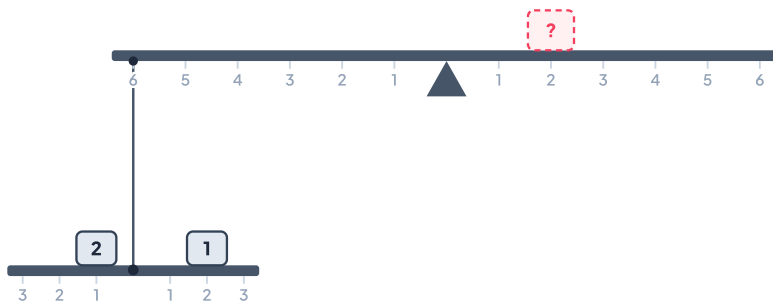
D

7

Band 4

Which weight balances the mobile?

(beams weigh nothing; numbers in kg)



(A) 3 kg

(B) 6 kg

(C) 9 kg

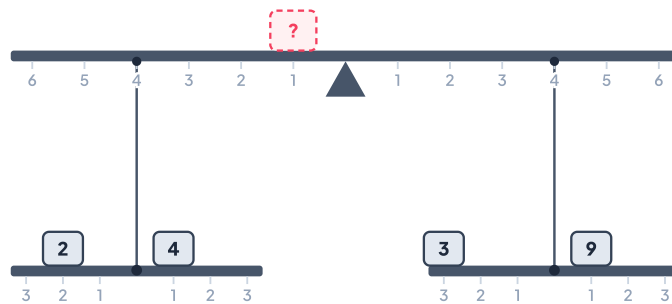
(D) 18 kg

8

Band 4

Which weight balances the mobile?

(beams weigh nothing; numbers in kg)



(A) 12 kg

(B) 24 kg

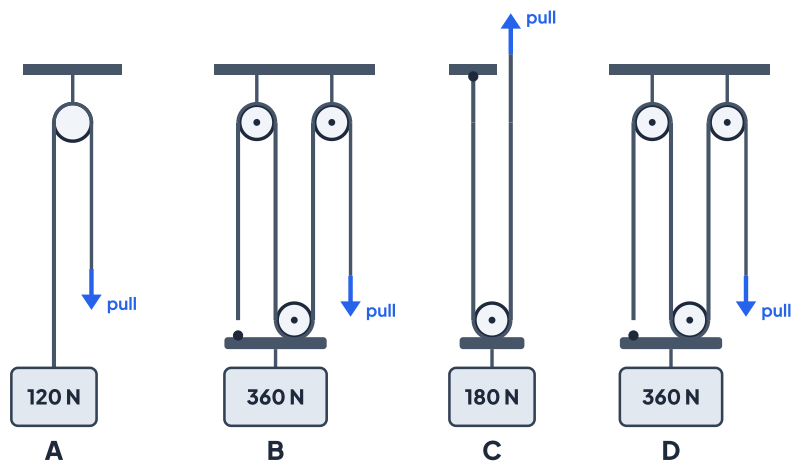
(C) 32 kg

(D) 48 kg

9

Band 5

Which load needs the least force to hold?



(A)

A

(B)

B

(C)

C

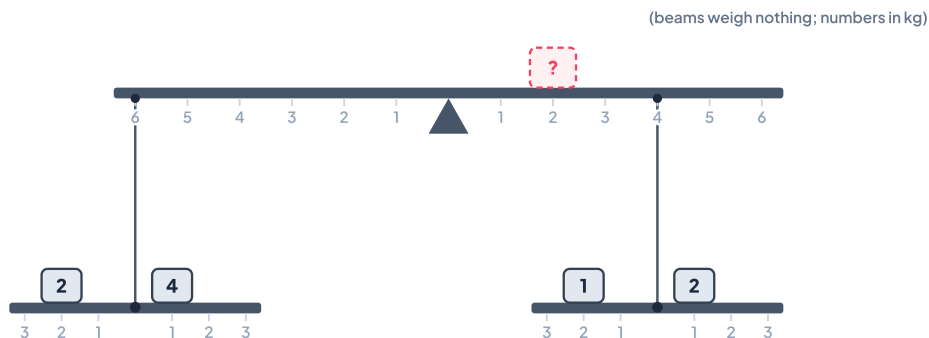
(D)

D

10

Band 5

Which weight balances the mobile?



(A)

6 kg

(B)

12 kg

(C)

14 kg

(D)

18 kg**Enjoyed these puzzles? There's so much more waiting for you online!**

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