

Continuous random variables – AS Further Mathematics Statistics1. [June/2022/Paper_7366/02S/No.2](#)

The continuous random variable Y has probability density function $f(y)$ where

$$\int_{-\infty}^{\infty} yf(y) dy = 16 \quad \text{and} \quad \int_{-\infty}^{\infty} y^2f(y) dy = 1040$$

Find the standard deviation of Y

Circle your answer.

[1 mark]

28

32

784

1024

