

Performance Metrics

Performance metrics for diamond verification instruments that separates diamonds from synthetic diamonds | Operation Category 1



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$$\text{Diamond False Positive Rate} = \frac{\text{Synthetic diamonds categorised as diamond}}{\text{All synthetic diamonds}}$$

The diagram shows a fraction where the numerator is a single orange diamond labeled '2'. The denominator is three orange diamonds labeled '2', '4', and '6' separated by plus signs.

$$\text{Diamond Accuracy} = \frac{\text{Diamonds categorised as diamond}}{\text{All diamonds}}$$

The diagram shows a fraction where the numerator is a single blue diamond labeled '1'. The denominator is three blue diamonds labeled '1', '3', and '5' separated by plus signs.

$$\text{Diamond Referral Rate} = \frac{\text{Diamonds categorised as refer}}{\text{All diamonds}}$$

The diagram shows a fraction where the numerator is a single blue diamond labeled '5'. The denominator is three blue diamonds labeled '1', '3', and '5' separated by plus signs.

$$\text{Synthetic Diamond False Positive Rate} = \frac{\text{Diamonds categorised as synthetic diamonds}}{\text{All diamonds}}$$

The diagram shows a fraction where the numerator is a single blue diamond labeled '3'. The denominator is three blue diamonds labeled '1', '3', and '5' separated by plus signs.

$$\text{Synthetic Diamond Accuracy} = \frac{\text{Synthetic diamonds categorised as synthetic diamond}}{\text{All synthetic diamonds}}$$

The diagram shows a fraction where the numerator is a single orange diamond labeled '4'. The denominator is three orange diamonds labeled '2', '4', and '6' separated by plus signs.

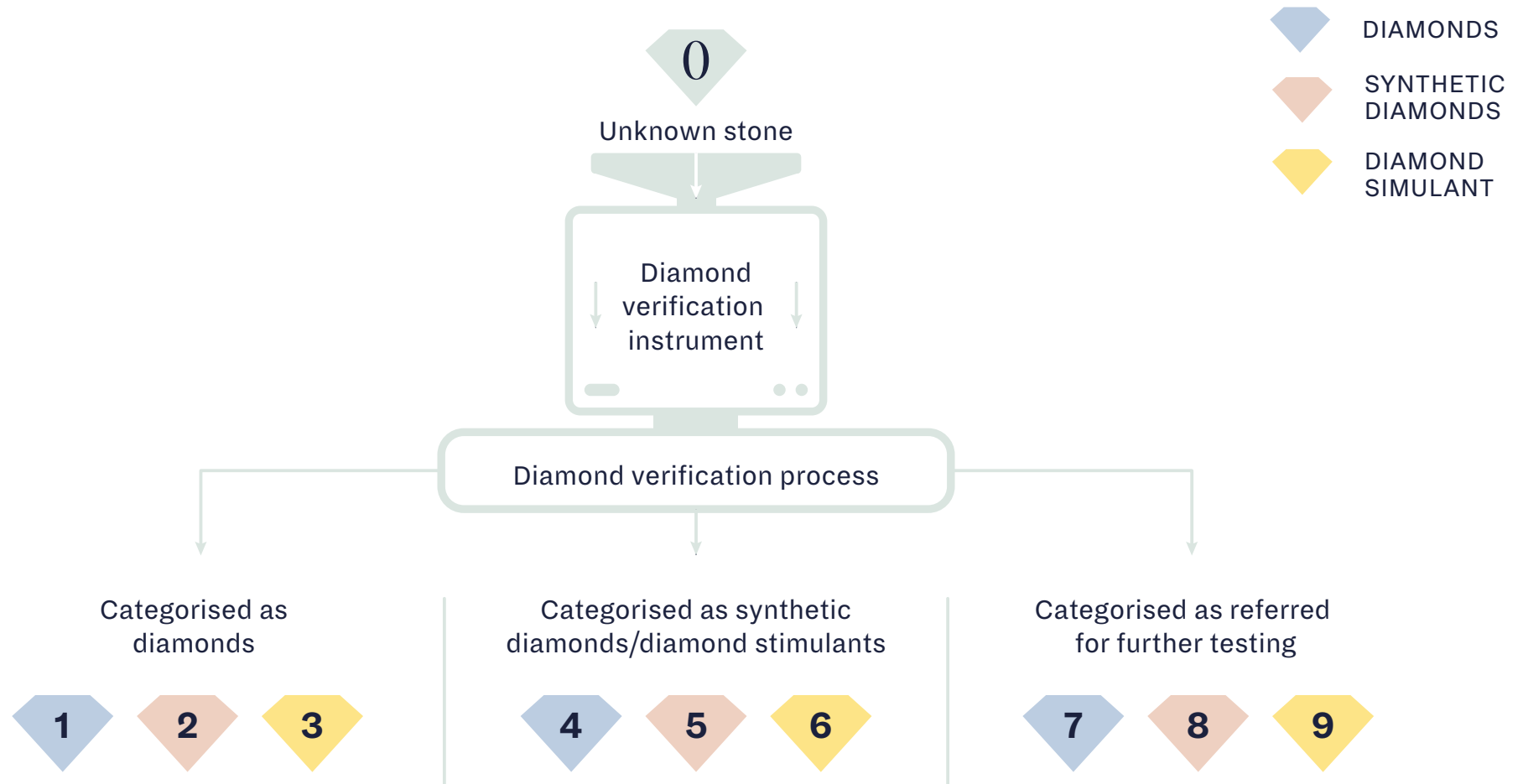
$$\text{Synthetic Diamond Referral Rate} = \frac{\text{Synthetic diamonds categorised as refer}}{\text{All synthetic diamonds}}$$

The diagram shows a fraction where the numerator is a single orange diamond labeled '6'. The denominator is three orange diamonds labeled '2', '4', and '6' separated by plus signs.

Performance Metrics



Performance metrics for Diamond Verification Instruments that separate diamonds from synthetic diamonds and diamond simulants, but cannot separate synthetic diamonds from diamond simulants | Operation Category 2



Performance Metrics



Performance metrics for Diamond Verification Instruments that separate diamonds from synthetic diamonds and diamond simulants, but cannot separate synthetic diamonds from diamond simulants | Operation Category 2

Diamond False Positive Rate
= Synthetic diamonds and diamond simulants categorised as diamond
All synthetic diamonds and diamond simulants

$$\frac{2 + 3}{2 + 3 + 5 + 6 + 8 + 9}$$

Diamond Accuracy
= Diamonds categorised as diamond
All diamonds

$$\frac{1}{1 + 4 + 7}$$

Diamond Referral Rate
= Diamonds categorised as refer
All diamonds

$$\frac{7}{1 + 4 + 7}$$

Synthetic Diamond and Diamond Simulant False Positive Rate
= Diamonds categorised as synthetic diamonds or diamond simulant
All diamonds

$$\frac{4}{1 + 4 + 7}$$

Synthetic Diamond Accuracy
= Synthetic diamonds categorised as synthetic diamond or diamond simulant
All synthetic diamonds

$$\frac{5}{2 + 5 + 8}$$

Diamond Simulant Accuracy
= Diamond Simulants categorised as synthetic diamond or diamond simulant
All diamond simulants

$$\frac{6}{3 + 6 + 9}$$

Synthetic Diamond Referral Rate
= Synthetic diamonds categorised as refer
All synthetic diamonds

$$\frac{8}{2 + 5 + 8}$$

Diamond Simulant Referral Rate
= Diamonds Simulants categorised as refer
All diamond simulants

$$\frac{9}{3 + 6 + 9}$$

Performance Metrics



Performance metrics for Diamond Verification Instruments that separate diamonds, synthetic diamonds, and diamond simulants | Operation Category 3



Performance Metrics



Performance metrics for Diamond Verification Instruments that separate diamonds, synthetic diamonds, and diamond simulants | Operation Category 3

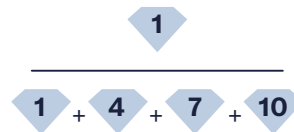
Diamond False Positive Rate

=
Synthetic diamonds and diamond simulants categorised as diamond
All synthetic diamonds and diamond simulants



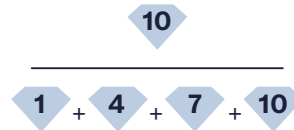
Diamond Accuracy

=
Diamonds categorised as diamond
All diamonds



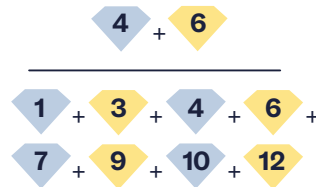
Diamond Referral Rate

=
Diamonds categorised as refer
All diamonds



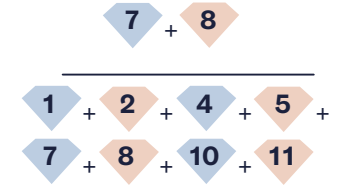
Synthetic Diamond False Positive Rate

=
Diamonds and diamond simulants categorised as synthetic diamond
All diamonds and diamond simulants



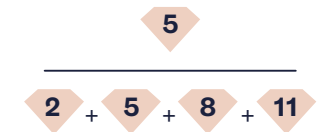
Diamond Simulant False Positive Rate

=
Diamonds and synthetic diamonds categorised as diamond simulants
All diamonds and synthetic diamonds



Synthetic Diamond Accuracy

=
Synthetic diamonds categorised as synthetic diamond
All synthetic diamonds



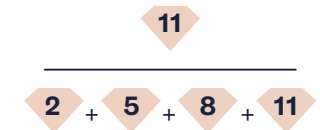
Diamond Simulant Accuracy

=
Diamond Simulants categorised as diamond simulant
All diamond simulants



Synthetic Diamond Referral Rate

=
Synthetic diamonds categorised as refer
All synthetic diamonds



Diamond Simulant Referral Rate

=
Diamonds Simulants categorised as refer
All diamond simulants

